COMMUNITY EDITION

Learn Clip Studio Paint

Third Edition

A beginner's guide to creating compelling comics and manga art



Inko Ai Takita | Liz Staley

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Packt

BIRMINGHAM—MUMBAI

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Third Edition

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To my dear parents, Miyako and Kazuo, my friends, and the memory of my grandparents, for their unconditional love and support. To all comic and manga lovers.

– Inko Ai Takita

Contributors

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She has delivered manga talks and workshops at Westminster Library, for the Guardian children's books online, and the V&A Museum. Through horror, folklore, and social issues stories, she continues to deliver high-quality manga. *Portrait of Violence* (New International) won an Independent Publisher Book Awards medal in 2018.

Her dark but fascinating manga adaptations *Manga Yokai Stories* (Tuttle) and *Tam O'Shanter* (Cranachan) are also available.

Inko's artist website: `http://dokoteiinko.wix.com/inkoredible`

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Liz Staley is a writer and digital artist with nearly 10 years of experience creating independent comics. *Learn Clip Studio Paint* is her third book with Packt Publishing. She has also written *Mastering Manga Studio 5* and *The Manga Studio EX5 Cookbook*. Teaching other artists about the benefits of Clip Studio Paint is one of her true passions. Originally from Baltimore, Maryland, Liz currently lives in Waynesboro, Pennsylvania, with her husband and her horse.

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Preface

Clip Studio Paint, previously called Manga Studio, is used by more than 4 million creators around the world. It is one of the most loved software among illustrators and manga and comic artists for its special features for drawing manga and comics. You can create black and white or fully colored comics and illustrations using just this software, a computer, and a graphics tablet. The EX version for professionals offers a page-based organizer and animation features. Whether you're an illustrator, a manga/comic artist, or even an animator, Clip Studio Paint has features that will improve your workflow and make your journey into the digital art realm easier and faster. This book is for Clip Studio Paint users at all levels. It gives clear guidance with many tips and visual examples. You will be a digital manga art master by the end of the book.

Who this book is for

If you have just started working on your art digitally or are trying to shift your creation process from analog to digital, this book is for you, as well as for people who want to brush up their knowledge and skills on using Clip Studio Paint. You should have basic computer skills and knowledge of installing drivers for computer peripherals.

What this book covers

Chapter 1, *Image Gallery of Manga and Illustrations Created by Clip Studio Paint*, showcases visual examples of Clip Studio Paint creations, showing ideas for people who are new to Clip Studio Paint or benchmarks for those who have already started digital art creations.

Chapter 2, *Installing Clip Studio Paint Pro and Interface Basics*, covers setting the software preferences, an introduction to the default interface, making workspaces, and creating new files.

Chapter 3, *Pages and Panels to Shape Manga*, takes a close look at your Clip Studio Paint workspace, then prepares it for a new file, finally setting up panels on the new pages.

Chapter 4, *Introducing Clip Studio Paint Brushes*, covers how to make digital marks and introduces us to customizing the brush engine, the tool properties, and saving and restoring brushes.

Chapter 5, *Penciling: Layer and Layer Property Palettes*, covers the different properties of digital layers, layer menu options, and the Layer Palette icons.

Chapter 6, *Erasers, Selections, and the Sub View Palette*, teaches you about the various eraser tools and selection tools and how to use the Sub View palette.

Chapter 7, *Using Text and Balloon Tools*, teaches you how to navigate the world of text and its options. Creating word balloons is also covered.

Chapter 8, *Getting Started with Inking Tools*, goes over the inking pens, brushes, and markers that come included in Clip Studio Paint. Some basics of inking are also covered.

Chapter 9, *Inking Special Effects*, covers the creation of special effect brushes, textured brushes, and brushes with patterns such as foliage.

Chapter 10, *Vector Layers and the Material Palette*, covers how to create vector images and using the Material Palette to add textures, patterns, and more to your images.

Chapter 11, *Creating Your Own Sound Effects*, covers creating specialized text, adding strokes and gradient to text, and how to use Mesh Transformation to morph text into punchy sound effects.

Chapter 12, *Making Layer Masks and Screentones*, covers the use and creation of layer masks, and also how to apply Screentones to black and white by using selections and layer masks.

Chapter 13, *All About Rulers*, covers the myriad of ruler tools in Clip Studio Paint. We will cover the basic rulers, as well as symmetry rulers, focus and parallel line rulers, and perspective rulers.

Chapter 14, *Using 3D Figures and Objects*, teaches you how to use the 3D materials included with Clip Studio Paint. Placing characters, posing them, and customizing poses and characters are all topics covered in this chapter.

Chapter 15, *Color Palette*, covers the color selection and mixing palettes such as the Color Wheel, Color Sets, Intermediate Color, Approximate Color, and Color History.

Chapter 16, *Using Clip Studio Paint to Color Your Manga*, discusses the use of reference layers, how to create flats using the Bucket Fill and Paint Unfilled Area tools, layer blending modes, and how to create colored line art.

Chapter 17, *Auto Actions and Your Workflow*, covers the benefits of auto actions, how to use default actions, and how to record and play back custom actions.

Chapter 18, *Exploring the Clip Studio Assets and Animation*, covers how to download new assets and materials using the Clip Studio Assets, and how to create animation timelines and cels to animate your drawings.

Chapter 19, *Exporting, Printing, and Uploading Your Manga*, covers how to use the print preview and print settings to create a physical copy of your manga. Exporting your work in various formats for printing and display on the web and Webtoon exports and Clip Studio SHARE are also covered.

Chapter 20, *Finding Your Own Manga Look*, covers how to choose drawing tools and colors and how to keep consistency and create a unique look for your manga.

To get the most out of this book

Having a graphics tablet or a tablet computer with a stylus and pressure sensitivity is highly recommended for using this software. Drawing with a stylus is much more natural than drawing with a mouse or trackpad. For more information on graphics tablets, see *Chapter 2*, *Installing Clip Studio Paint Pro and Interface Basics*.

Software covered in the book	**OS requirements**
Clip Studio Paint 1.10.0 and above	Windows or macOS X

> **Disclaimer**
>
> There might be some differences in the option names depending on what version of Clip Studio Paint you are currently using.

Download the color images

We also provide a PDF file that has color images of the screenshots/diagrams used in this book. You can download it here: `https://static.packt-cdn.com/downloads/9781800564978_ColorImages.pdf`.

Conventions used

There are a few text conventions used throughout this book.

`Code in text`: Indicates code words in text, database table names, folder names, filenames, file extensions, pathnames, dummy URLs, user input, and Twitter handles. Here is an example: "Export the `Manga page 1.jpg` image file to an internet-friendly file."

Bold: Indicates a new term, an important word, or words that you see onscreen. For example, words in menus or dialog boxes appear in the text like this. Here is an example: "Select **G-Pen** from the **Pen sub tool** palette."

> **Tips or important notes**
> Appear like this.

Get in touch

Feedback from our readers is always welcome.

General feedback: If you have questions about any aspect of this book, email us at `customercare@packtpub.com` and mention the book title in the subject of your message.

Errata: Although we have taken every care to ensure the accuracy of our content, mistakes do happen. If you have found a mistake in this book, we would be grateful if you would report this to us. Please visit `www.packtpub.com/support/errata` and fill in the form.

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1
Image Gallery of Manga and Illustrations Created by Clip Studio Paint

This chapter is dedicated to a showroom for visual examples of Clip Studio Paint (CSP) creations. Just a glance at this chapter tells us exactly what features and capabilities CSP has. This chapter will also suggest creative ideas for people who are new to CSP, or benchmarks for those who have already embarked upon digital art creations. Some of the artworks display the process in order, which will be explained in detail step by step in later chapters. You will find chapters that introduce the related tools in the image captions, so it allows you to jump to chapters where the precise techniques you would like to learn are set out in detail. The book is designed more like an encyclopedia as opposed to a language textbook, so feel free to skip chapters where you are already familiar with the skills required.

This chapter will cover the following main topics:

- Black and White illustration gallery
- Manga gallery
- Special tools
- Color illustration gallery

Black and White illustration gallery

We shall start by looking at very basic black and white images. Any artists who start from scratch may use simple black and white drawings first, before moving on to draw in color. Although they have no colors, you can experiment a lot with gray tones and textures.

Let's see what you can do in CSP with limited color.

Pencil Tools

The following diagram shows examples of pencils that are available in the tools. Details of how to use pencils can be found in *Chapter 5*, *Penciling: Layer and Layer Property Palettes*:



Figure 1.1 – An example of a pencil tool drawing

In the following section, we'll look at inking tools.

Inking tools

The following diagram shows examples of pens that are available in the tools. Details of how to use pens can be found in *Chapter 8*, *Getting Started with Inking Tools*:



Figure 1.2 – An example of an inking tool drawing

In the following section, we'll see what a brush tool is.

Brush tools

The following diagram shows examples of brushes that are available in the tools. Details of how to use brushes can be found in *Chapter 4*, *Introducing Clip Studio Paint Brushes*:



Figure 1.3 – An example of a brush tool drawing

Decoration tools

The following diagram shows examples of decorations available in the tools. Details of how to use decoration tools can be found in *Chapter 4*, *Introducing Clip Studio Paint Brushes*:

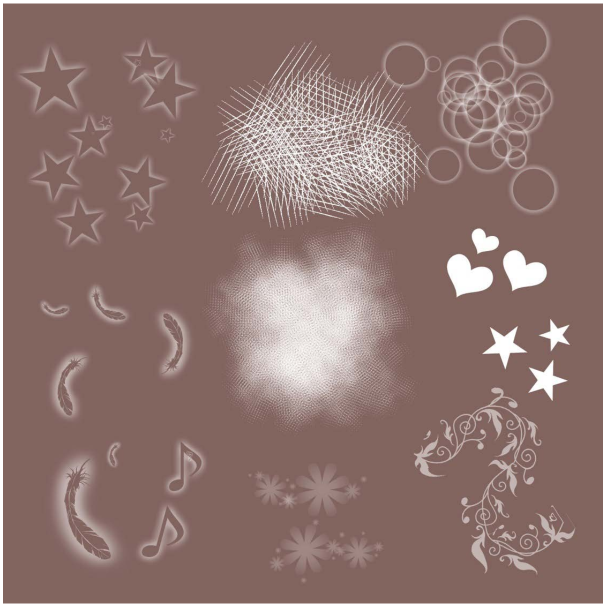


Figure 1.4 – An example of a decoration tool drawing

Manga gallery

Manga is different from one-off illustrations because it contains sequential images to tell a story. Hence, there are some special methods that only exist in Manga, comics, and graphic novels; for example, panels to express time passing, and speech balloons to express characters' voices. CSP is made for this particular media, and it makes manga artists' lives much easier when they can employ these methods.

Manga panels

The following diagram shows examples of manga panels. Details of how to create panels can be found in *Chapter 3*, *Pages and Panels to Shape Manga*:

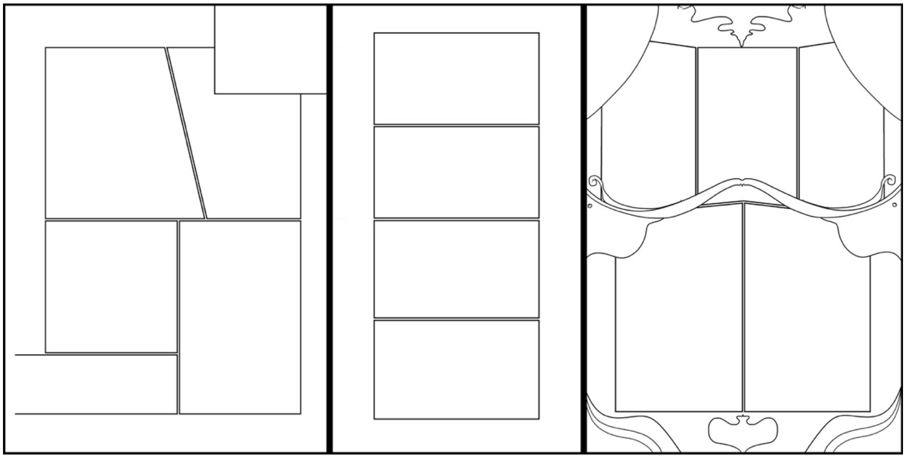


Figure 1.5 – Examples of different styles of panels

Manga creation process

Manga creation involves several stages, including panel sketching, inking, coloring (if it's a color manga), adding tones and effects, and finally adding text. You can learn how to add text and speech balloons in *Chapter 7*, *Using Text and Balloon Tools*:

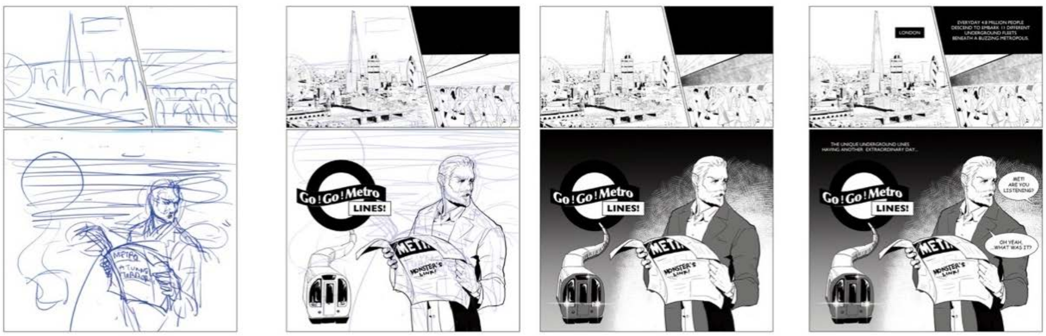


Figure 1.6 – Manga creation process

In the following section, we'll look at the special tools that Clip Studio has to offer.

Special tools

Some amazing tools are available for speeding up the process or expanding your range of visual expressions in CSP. Except for the Pastel and Brush tools, the ones we see in the following images are only possible in digital drawings. So why not take advantage of them?

3D Figures

You can refer to or trace over 3D figures to draw characters. Learn more about using 3D models in *Chapter 14*, *Using 3D Figures and Objects*:



Figure 1.7 – Drawing based on 3D figures

Shape tools

For accurate lines in terms of drawing shapes, you can use Shape tools. Learn more in *Chapter 10*, *Vector Layers and the Material Palette*:

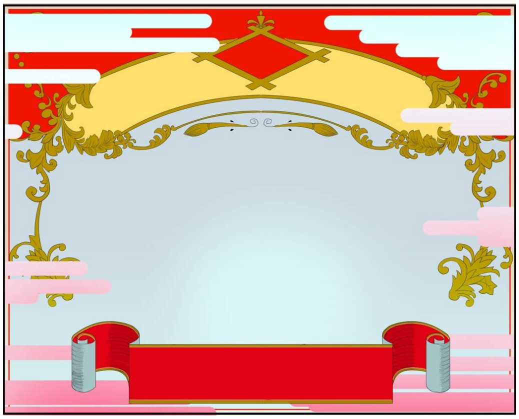


Figure 1.8 – Drawing using Shape tools

Color illustration gallery

Clip Studio Paint offers various coloring tools for your creations. It can be very expensive to try out many alternative coloring tools in real life. You need an art working studio first, then working tables, an easel, papers, canvases, brushes, and to buy as many tube colors as possible. One good thing about creating digital art, however, is the fact that you don't need any. Of course, drawing with analog tools and digital tools are not the same thing, but you can just enjoy trying out what coloring tools are good for you on Clip Studio Paint first, can't you?

You can find out more about coloring in *Chapter 16*, *Using Clip Studio Paint to Color Your Manga*.

Bucket tool

People often color an image by using the Bucket tool's Block coloring or Anime coloring features. It's a simple and quick way to add color to your art. Just select a coloring area and then click the Bucket tool. Learn more in *Chapter 16*, *Using Clip Studio Paint to Color Your Manga*:



Figure 1.9 – An example of block coloring using the Bucket tool

Pastel tools

As you have seen in the first pencil tool image, CSP can offer tools with scratching or fading effects. Pastel tools are also good for coloring, with a warm hand-drawn effect as shown in the following image:



Figure 1.10 – Drawing using Pastel tools in color

Brush tools

You can also color your art with Brush tools. Watercolor brushes have bleeding effects, gouache brushes have smearing effects, and oil brushes have dense color effects. Learn more in *Chapter 4*, *Introducing Clip Studio Paint Brushes*:

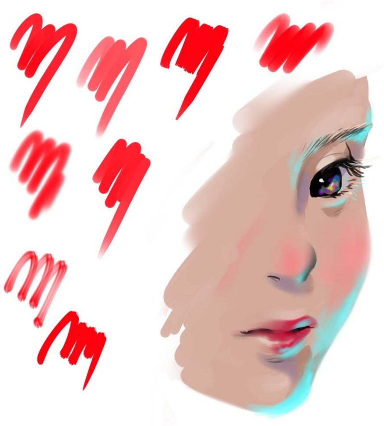


Figure 1.11 – Drawing using Brush tools in color

Layer blending mode

After completing the basic coloring of your drawing, you might want to add shade or lighting, or light reflection, or even change the overall impression. It is possible to do this by using layer blending modes. You can see the entirety of the effects available in *Chapter 16, Using Clip Studio Paint to Color Your Manga*:



Figure 1.12 – Before and after extra colors are added using the Overlay layer blending mode

Using textures

If you want to add paper/scratched/decayed texture to your art, you can always add extra effects by creating or downloading texture images.

You can simply add an extra layer with the texture image and change the layer blending mode. You can learn more in *Chapter 16, Using Clip Studio Paint to Color Your Manga*:



Figure 1.13 – Before and after Japanese paper texture has been added

Summary

Now that you have seen some actual art created by using Clip Studio Paint, I hope you have a visual idea of what tools and functions the program offers. It is fine if you don't know the exact details of how this is achieved at this point because you don't have to be an expert to use them all, but it is always good to know the tools and functions that are available.

You will have also noticed that some analog effects, such as scratching or bleeding, can be made digitally. This will give you the opportunity to cause mishaps, smudges, or accidental merges of color, which might add interesting effects to your creations!

If you have some images already scanned into your device, you can add these effects that you see in this gallery with Clip Studio Paint as an extra! As I have already mentioned, once you have read this chapter, installed the program, and have a graphic tablet, you can ignore the order of the other chapters and jump to a specific chapter that details the techniques you want to learn about.

But, most of all, enjoy Clip Studio Paint!

2
Installing Clip Studio Paint Pro and Interface Basics

In this chapter, we're going to dive right into the thick of it and start getting to know Clip Studio Paint. First, we'll take a look at the recommended system specifications for running Clip Studio Paint and how to install the program. We'll also talk about graphics tablets, their importance, and how to obtain one.

Once we have Clip Studio Paint installed, we'll get to know the interface. First, we'll go over the parts of the default interface. Then, we'll learn how to customize and change the interface to suit our needs, as well as how to select tools and about the various palettes that comprise the Clip Studio Paint interface and their properties.

By the end of this chapter, you will be able to install Clip Studio Paint and identify the different parts of its interface.

In this chapter, we will learn about the following topics:

- System specs, installation, and your serial number
- About graphics tablets
- The default user interface

- Moving, collapsing, and stacking palettes
- Using the tool palette
- Using the Command Bar

System specs, installation, and your serial number

Before installing Clip Studio Paint, we need to ensure that our computer hardware is capable of running the program. Graphics software can be taxing on system resources, so it is important to ensure that your computer is up to the task!

Clip Studio Paint is made for both Windows PCs as well as Mac operating systems, if you pay by one-time purchase. It is also available on iPad, iPhone, and Galaxy for free trial and monthly usage plans. Once we have ensured that we can run the program on our computer, we can then download and install the software and get it running for the first time.

System requirements

To run Clip Studio Paint effectively, our computer must meet certain system requirements. These requirements are slightly different for PC than for Mac, so please check the system requirements carefully against the computer that you will be installing the software on to ensure that Clip Studio Paint will run properly.

Both PC and Mac computers have the following requirements for use of the program:

- **Storage space**: At least 3 GB of storage space available on the hard drive.
- **Monitor**: XGA (1,024 x 768) or higher required, WXGA (1,280 x 768) or higher recommended, high color (16-bit 65536 color or higher) required.
- **Internet access**: An internet connection will be necessary for license authentication.
- **Scanner**: Scanners compatible with TWAIN.
- **Printer**: A printer compatible with the operating systems mentioned as follows.

Windows system requirements

The following are the requirements for running Clip Studio Paint version 1.10.0 on Windows:

- Operating system:

  a) Microsoft Windows English operating system

  b) Windows 8.1 (64 bit)

  c) Windows 10 (64 bit)

- Main computer/CPU:

  a) Intel processors compatible with SSE2 or an AMD CPU.

  b) GPUs compatible with OpenGL 2.1.

  c) 2 GB memory or more is required, 8 GB or more is recommended.

> **Important note**
>
> Memory space and CPU capability are required for top software performance regarding image size, number of layers, and so on. Generally, the larger the image size and the number of layers, the more memory and the faster the CPU required.

- Tablet:

  a) Tablets compatible with the Windows Ink platform.

  b) Pen tablet or tablet monitor that supports a pressure-sensitive stylus (compatible with Wintab).

  c) For tablets compatible with Wintab, WACOM devices are recommended.

macOS requirements

If you are using a macOS computer, you will need to meet the following system requirements to run Clip Studio Paint version 1.10.0:

- Operating system:

  macOS English operating system 10.13, 10.14, 10.15, or 11

- Main computer/CPU:

  a) Intel processor.

  b) GPUs compatible with OpenGL 2.1.

  c) 2 GB memory or more is required, 8 GB or more is recommended

We'll go into tablets in more detail in the *About graphics tablets* section. If your computer system meets or exceeds the requirements listed, then it's time to install the program!

Installing the program

To purchase and download the Clip Studio Paint program, you will need an internet connection. The program is available through the Clip Studio website. To access the English version of the website, you will need to visit the URL `http://www.clipstudio.net/en` in your internet browser.

Clip Studio does have a free trial of the program, which is very handy if you want to try the program to make sure your computer system can run it or if you want to explore the program and ensure that it will meet your needs before buying it. At the time of writing this book, the Clip Studio Paint free trial lasts for 30 days. You can try both the Clip Studio Paint Pro and Clip Studio Paint EX versions of the program. Also, when using the trial version of the software, you will need to register for a free Clip Studio account.

We will discuss the Clip Studio account further in *Chapter 18*, *Exploring the Clip Studio Assets and Animation*.

> **Important note**
>
> Clip Studio Paint Pro or Clip Studio Paint EX? Which version should you choose? Unlike previous versions of this program, there are very few differences between the Pro and EX versions of the software. The Pro version is the standard version and EX is the full-featured version. Clip Studio Paint Pro is less expensive than the EX version. The biggest difference between the two versions of the program is that the EX version allows you to create multi-page files (files with multiple pages in them that can be viewed and edited all at once) and that the EX version has no limit regarding the number of animation frames in a file while the Pro version limits animation frames to a total of 24. If you will be creating long animations, chapters of a comic or graphic novel, or other works where viewing multiple pages is needed, it is highly recommended to get the EX version of Clip Studio Paint.

Downloading the trial version

Once we're on the Clip Studio website, we'll need to download the trial version or buy the software. To download the trial version, complete the following steps:

1. On the `ClipStudio.net/en` website, click on the green button labeled **Free Trial**.
2. Choose the version of the software compatible with your operating system (Windows or macOS) and click on the corresponding **Download Trial** button.
3. On the next window, click on the button labeled **Start Download**.
4. The program installation file will be saved to your computer.

Purchasing Clip Studio Paint

If you are ready to purchase Clip Studio Paint, follow these steps:

1. On the `ClipStudio.net/en` website, click on the button in the upper-right-hand corner labeled **Buy Now**.
2. The price for both the Pro and the EX versions will be shown. Click on the **Buy Now** button beneath the version of the software that you wish to purchase.
3. On the next screen, fill out your personal information, making sure to fill out all of the required fields.
4. Under the **Payment Option** section, click on the **PayPal Checkout** button to pay with PayPal. Complete the PayPal payment on the next screen by following the directions.
5. To use another form of payment, choose the relevant payment option from the first drop-down menu, then select your currency from the second drop-down menu. When **Credit Card** is selected under the payment option, some fields where you can enter your credit card information will be automatically displayed.
6. Complete the necessary fields and click on the button marked **Next**.
7. To pay with a check or another payment method, select **Check – prepayment** from the drop-down menu. Click the **Next** button.
8. On the next screen, review the displayed information. To correct any errors, click on the **Edit** button next to that section and make the necessary changes. If all of the information is correct, click on the **Buy Now** button to complete your purchase.

Now that we have the program saved to our computer, we can begin the installation process. This process is the same for both the trial and purchase versions of the software.

When registering a purchased version, however, we will enter the serial number for the software while launching the application for the first time.

Your serial number will be sent to the email address that you registered with when purchasing the program. It is very important to keep this serial number in a safe place where you can locate it! Your Clip Studio Paint serial number allows you to register the software on up to two computers, so long as the following conditions are met:

- The two computers must be owned and administered by a single user.
- Use of the product is limited to the primary user and one supplementary user appointed by the primary user.
- The software must *not* be used simultaneously on the two devices.
- The two computers may have a different operating system (for example, Windows 8 and Mac OS X 10.13). Please refer to the official conditions of use provided in the end user license agreement. If you wish to use the product on three or more computers, please purchase additional licenses.

You must also have your serial number if you purchase a new PC and need to install Clip Studio Paint on it again. Save the email from your registration in a safe folder in your email client. I also keep important serial numbers in a text file in a cloud backup, such as Dropbox or Google Drive, in case something happens to my emails. You may also want to make another backup of your serial number on a removable drive such as a USB drive to be extra certain that it is safe and able to be recovered in case of an emergency.

Installing on a Windows computer

Complete the following steps to install Clip Studio Paint to your Windows computer:

1. Locate the install file named `CSP_1XXw_setup.exe` that has been saved to your computer and double-click it to launch the setup program.
2. The welcome screen will be displayed. Click on **Next** to continue.
3. Read the license agreement. Click on the circle next to **I accept the terms of the license agreement** to accept the terms. Click **Next** to continue.

4. The **Choose Destination Location** window will be displayed. The setup will default to a folder in `Program Files` for installation. If you wish to change the location of this folder, click on the button labeled **Change** to the right of the currently selected folder name and choose the location of the desired folder. Once the desired folder is selected, click **Next**.
5. On the next screen, choose the desired language for installation. Note that when using a purchased version, the language that correlates with the serial number must be used. If using the trial version, select the language you wish to install. Then, click **Next**.
6. Click **Install** to complete the installation.
7. When the installation completion screen appears, click on the **Finish** button to exit the setup.

Installing on a Mac computer

Complete the following steps to install Clip Studio Paint to your Mac computer:

1. Locate the file named `CSP_1XXENm_app.pkg` that has been saved to your computer and double-click it to launch the **Installation** window.
2. Once the setup program launches, click on **Continue**.
3. Read the license agreement, then click on **Continue**.
4. To continue, you must click on **Agree** on the next screen to accept the terms of the license agreement.
5. On the **Installation Type** screen, click **Install** to continue.
6. Select the desired language for installation. Note that when using a purchased version, the language that correlates with the serial number must be used. If using the trial version, select the language you wish to install. Then, click **Ok**.
7. Once the installation completes, you will see a screen stating that the installation was successful. Click on **Close** to exit the setup program.

> **Important note**
>
> If you see a warning message when you try opening the file, you need to go to **System Preferences** then **Security & Privacy** and click the key icon to be able to make changes. In the **General** section, check **App Store and identified developers** and try opening the file again.

Starting the program for the first time

Now that we have the program installed, we're ready to launch it for the first time. On the initial launch, you will have the opportunity to download additional materials, enter and verify your serial number, or register to use the trial version. This is the last step before we can open the Clip Studio Paint program and begin exploring the interface, so let's get started.

Registering for a trial version of Clip Studio Paint

Follow these steps to register for a trial version of Clip Studio Paint:

1. Double-click the Clip Studio application icon.
2. A message will appear stating that the program is preparing for use. Click on **OK** to continue.
3. A message will display stating that you can download additional materials provided by CELSYS. To start the material download, click on **Yes**. Wait until the download is complete. Depending on the size of the materials, this download may take several minutes. To skip downloading, click **No**. Additional materials can be downloaded later by using the instructions in the *Downloading additional materials* section.
4. After launching Clip Studio, click on the **Paint** icon on the left-hand side to launch Clip Studio Paint.
5. On the next screen, click on the button labeled **Use trial version (without limited features)** to register for your free Clip Studio account.
6. Click **Register for trial version** on the next screen. Then, enter your email address and a password to create your Clip Studio account. Click **Next** when finished.
7. Clicking **OK** on the next screen completes your trial version registration.
8. In the trial version, you will be able to select the EX or Pro version of the software each time Clip Studio Paint is launched. At the version selection window, select the version you are interested in trying to launch.

> **Important note**
>
> You can begin the trial version of the software without registering for a Clip Studio account, but the software will have limited features.
>
> Registering for an account is free, secure, and fast, and it will give you unlimited features to try in Clip Studio Paint!

Registering for a licensed version of Clip Studio Paint

Follow these steps to register for a licensed version of Clip Studio Paint:

1. Double-click the Clip Studio application icon.
2. A message will appear stating the program is preparing for use. Click on **OK** to continue.
3. A message will display stating that you can download additional materials provided by CELSYS. To start the material download, click on **Yes**. Wait until the download is complete. Depending on the size of the materials, this download may take several minutes. To skip downloading, click **No**. Additional materials can be downloaded later by using the instructions in the *Downloading additional materials* section.
4. After launching Clip Studio, click on the **Paint** icon on the left-hand side to launch Clip Studio Paint. On the next screen, enter the serial number from your documentation in the appropriate text entry boxes. Click **Register License**.
5. Select **Verify license right now**, then click **Next**.
6. On the **License registration** screen, select **Perform automatically**, and then click **Next**.
7. If the license check completes successfully, you will see a screen stating it was successful. Click **Next** to launch the software.
8. If the license check doesn't complete successfully, you can verify the license in your web browser. On the **License verification error** screen, select **Yes, verify license in another procedure**, and then click **Next**.
9. On the next screen, click on the link to connect to the website in your browser. This will issue an authentication key.
10. Enter the authentication key in the provided text boxes, and then click **Next** to continue. If the license check is successful, click on **OK** to launch the software.

Changing a license

There are a few cases where the license may need to be changed:

- When changing from the trial version to the purchased version
- Upgrading the software from the Pro version to the EX version
- Upgrading to Pro or EX versions from the DEBUT version

To change a license, follow these steps:

1. Launch the Clip Studio Paint software.
2. From the **Help** menu, select the **Register License** option (or the Clip Studio Paint menu in macOS).
3. Enter the new license serial number.

Downloading additional materials

If the additional materials were not downloaded during the initial registration of the program, they can be downloaded later by using the following steps:

1. Launch the Clip Studio application by double-clicking the icon.
2. Once Clip Studio is open, click on the settings menu (the gear icon) in the top right-hand corner.
3. Click **Download additional materials** now from the menu.
4. When the download confirmation message is displayed, click **Yes** to begin the download. Depending on the size of the materials, this download may take several minutes.

Once we install the program, we need to have a tool to draw on the program! Let's start finding out what we use for creating art in Clip Studio Paint.

About graphics tablets

When working in an art software such as Clip Studio Paint, having a graphics tablet makes life a lot easier. So, what is a graphics tablet and where can you obtain one?

What is a graphics tablet?

A graphics tablet is a computer peripheral that comes with a stylus. It allows you to hold a stylus and draw the way that you would with a pencil or pen on paper. The following diagram illustrates a basic tablet and stylus:

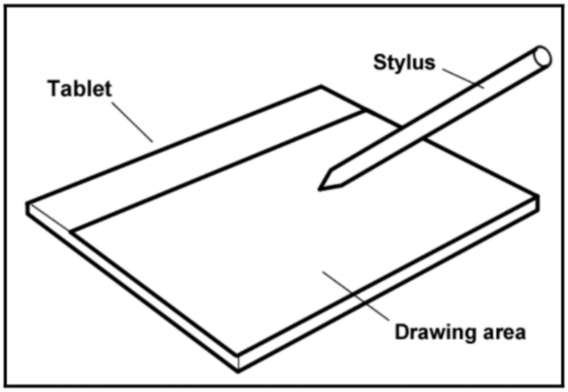


Figure 2.1 – A graphics tablet

There are many different types and brands of graphics tablets, all ranging in price from under $100 to over $2,500, so it is easy to find a tablet that is within your budget. I cannot express enough how much easier working in Clip Studio Paint is when you have a tablet!

There are many different factors to consider when shopping for a graphics tablet. Let's break some of those options down so that you can make a good choice when purchasing your tablet.

What type of tablet should I buy?

There are two primary types of tablets: traditional tablets and monitor tablets. Traditional tablets are slates that plug into or connect wirelessly to your computer. You then use the stylus to draw on the tablet while looking at the separate monitor, just like using a mouse on a computer.

A monitor tablet is a tablet with a monitor screen built into it. You then use the stylus directly on the screen so that you can see your hand and what you're drawing at the same time. This method feels more like using traditional paper and pencil and requires less of an adjustment period for new tablet users because there is less disconnect between what your hand is doing and what your eyes are seeing.

However, this comes at a price. Monitor tablets are becoming more affordable every year, but they are still much more expensive than a traditional tablet. If you are purchasing a tablet for a young artist or are someone just getting into digital art, I always recommend getting a traditional tablet. They are far more affordable and usually easy to find second-hand, but still in good working order. For more established artists who do a lot of art and know for certain that they like working digitally, investing in a larger tablet or a tablet monitor will usually speed up your workflow and make life easier, so it makes sense to invest in a higher-end tablet.

How large of a tablet should I buy?

Tablets come in all sizes, from no bigger than a traditional mouse pad to the size of a tabletop. The size of the tablet that you buy is very much dependent on how you draw. Sit down and draw on a piece of regular paper and try to pay attention to how large or small you draw. You'll need to figure that out before you can decide on the size of the tablet you want to buy!

Another thing to consider when looking at different sizes of tablets is the space you have to store it. If you are using the tablet with your laptop and will be traveling with it often, or if you have only a small amount of space on your desk, you will want to purchase a smaller tablet that is more easily transported. However, if you have a larger area or will only be using the tablet at a desk, a larger tablet could be the right fit for you. I find that people who draw small can be comfortable with a small tablet size. Personally, I draw rather large and tend to take up the whole sheet of paper when I draw, so I like a larger-sized tablet when I work because it gives me more room to work with.

What tablet brand should I buy?

It used to be that you only had one choice of tablet brand, but in the past several years, more companies have started manufacturing their own graphics tablets. This means that there is a wide selection of tablets available, all with their own pros and cons. Some of the most well-known of these tablet brands are Wacom, Yiynova, and Huion. Each brand has a wide range of different sized and priced tablets, most of which you can find on their websites or by searching for them on sites such as Amazon.

I often get asked what brand of tablet I would recommend, and for me, there is one clear winner: Wacom. From my personal experience, Wacom tablets are of the highest quality and last the longest. Their cheapest tablets are in the 50-100 USD range, and you can often find them used on eBay and Amazon as well, so with a bit of searching, you should be able to find a tablet for any budget.

Where can I purchase a graphics tablet?

It can be difficult to find a tablet in a local store, but ordering online allows for a better selection, and you may be able to find one for a much better price.

Tablets can be ordered from lots of websites. Many manufacturers sell them directly from their own sites. You can also find used or new tablets on sites such as Amazon or eBay. Some websites even sell refurbished tablets: tablets that are used but have been repaired or have had hardware replaced in them. When purchasing a monitor tablet, it may be best to look for a refurbished one to get the best deal if cost is a concern.

> **Important note**
>
> The Clip Studio Paint iPad version is as good as the computer version. But please remember that purchasing Clip Studio Paint on a computer doesn't mean you can use the iPad version for free. You need to pay the monthly fee for the iPad version regardless of whether you already have Clip Studio Paint on your computer. To learn more about the Clip Studio Paint price range, go to `ClipStudio.net/en`.

Now that we have Clip Studio Paint installed, and we have chosen our graphics tablet, it's time to start getting to know this amazing art software.

Taking a look at the default interface

Once you launch Clip Studio Paint, you will be greeted by the default interface. New users often get to the default interface and panic. It can be a bit overwhelming at first but I promise it's not so scary! With a little bit of exploration, we can break down the default interface and understand what each section is. In the next section, we'll even learn how to customize the interface to suit our own needs. But for now, let's take a look at the default user interface.

The following screenshot shows what you may see when starting up your program for the first time:

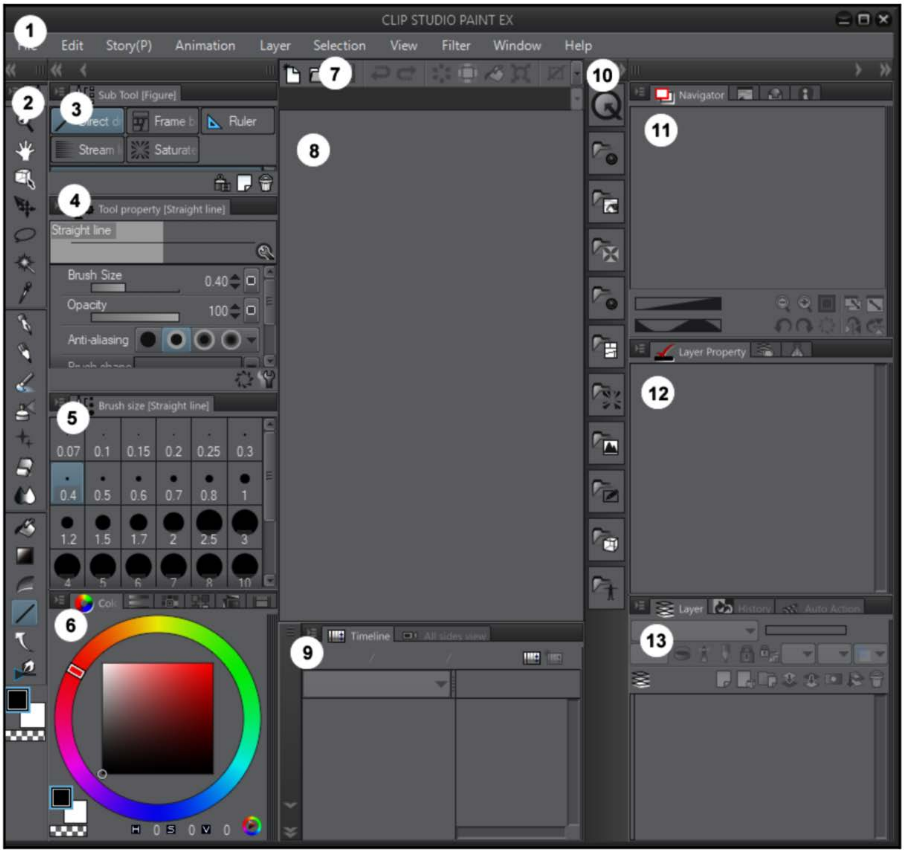


Figure 2.2 – Screenshot of the default interface

The numbers in the preceding screenshot correlate to the following:

1. Menu bar
2. Tool palette
3. Sub Tool palette
4. Tool property palette
5. Brush size palette
6. Color palette
7. Command Bar

8. Canvas display
9. Timeline palette
10. Quick Access/Material palettes
11. Navigator/Sub View palettes
12. Layer Property palette
13. Layer/History/Auto Action palettes

Now, let's break down what each of these parts of the program does.

The menu bar is where you will find many of your options, such as creating and saving files, program preferences, viewing preferences, and more.

The tool palette holds all of the various tools that we'll be using to create our comics and illustrations. At the top of the tool palette are tools such as the magnifying glass, hand tool, and selection tools. Below these are drawing tools, such as the pencil, pen, brush, decoration, eraser, and blending tools. In the bottom third of the tool palette are tools such as the fill tool, gradient tool, line and ruler tools, text tools, and correct line tools. The final part of the tool palette displays our current foreground and background color selections, as well as a transparent color selection. We'll be discussing all of these tools as we continue through this book, so don't worry if you don't know what all of them do just yet.

The **Sub Tool** palette contains options for each of the tools in the tool palette, and it changes depending on which tool we currently have selected:

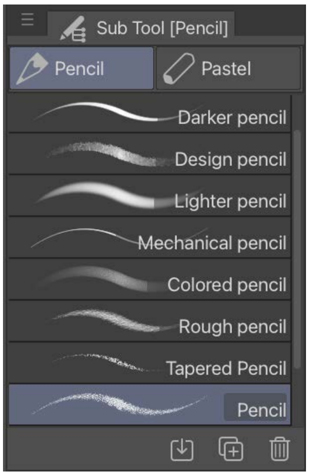


Figure 2.3 – Screenshot of the Sub Tool palette

At the top of this palette are the different categories of tools under the **Pencil** category. Our currently displayed category is shown in blue. In the central area of the palette are the different types of pencil tools. The tools displayed in your Sub Tool palette may be different from what is shown in the preceding screenshot.

The **Tool property** palette displays options for the currently selected tool. Each tool can be customized to meet our individual needs, but let's look at the default properties for **Darker pencil**, as shown in the following screenshot:

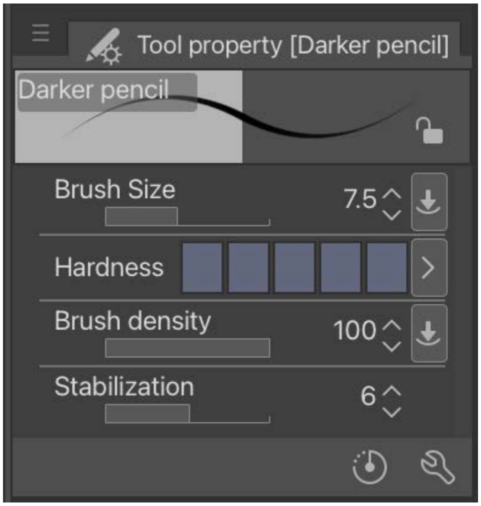


Figure 2.4 – Screenshot of Tool property

We will explore this palette in detail later in this chapter.

The **Brush Size** palette allows us to quickly change the size of our brush by selecting one of the preset brush sizes from the icons shown.

The color palette offers us several options for choosing and mixing colors, all of which we'll explore later on in *Chapter 15*, *Color Palette*.

The Command Bar is a powerhouse in Clip Studio Paint, even though it doesn't look like much. This little piece of the interface gives us quick access to frequently used functions, such as creating a new file, saving, undoing, and even exporting files. The best thing is that it's completely customizable, too! We'll learn how to customize the Command Bar in *Chapter 3*, *Pages and Panels to Shape Manga*.

When there is a drawing or file currently open in Clip Studio Paint, it will be displayed in the canvas display in the center of the program.

The **Quick Access** and **Material** palettes have a lot going on, but they're an extremely useful part of the Clip Studio Paint software. The **Quick Access** palette gives us access to more frequently used actions, much like the Command Bar. The **Quick Access** palette can also be customized, but unlike the Command Bar, it has two sets inside of it. This allows more flexibility, as set 1 could be used for functions such as save and undo, while set 2 could be set up with the most used tools or other commands to make tasks such as coloring easier. We'll explore the **Quick Access** palette more in *Chapter 3*, *Pages and Panels to Shape Manga*.

This part of the software also contains the **Material** palette. Materials can be everything from comic frame templates to word balloons, to photographs, to special brush designs, to 3D models. There's a huge variety of items contained in the **Material** palette. We'll learn more about 3D models in *Chapter 14*, *Using 3D Figures and Objects*, and more about the **Material** palette in *Chapter 10*, *Vector Layers and the Material Palette*.

The **Navigator** palette contains several tabs inside of it, each with a different function. The **Navigator** palette shows the currently active file, along with a red rectangle that outlines the currently viewed section of the canvas. This is useful when working zoomed in on a page or illustration. Also in this palette is the **Sub View** palette, which can be used to display reference images and more. We'll discuss **Sub View** further in *Chapter 6*, *Erasers, Selections, and the Sub View Palette*. The **Item Bank** palette tab displays any 3D objects that are currently being used in the open file. Finally, in this palette, we have the **Information** palette tab, which shows the percentage of system and application resources currently being used and also the *X* and *Y* coordinates of the current position of the cursor.

Beneath the **Navigator** palette is the **Layer Property** palette, which also has a few palette tabs inside of it. The **Layer Property** palette tab gives us the options available for the currently active layer. We'll be discussing layers and layer properties in more detail in *Chapter 5*, *Penciling: Layer and Layer Property Palettes* . Also in this palette is **Search Layer**, which allows us to filter out layers and find layers easily depending on certain parameters. This is a very handy tool for files with lots of layers. Finally in this palette is the **Animation Cels** palette tab. When making animations, this tab will display our animation cels.

The final part of our interface is the **Layer** palette, which also has several palette tabs in it. The first tab is the **Layer** palette tab, which shows all the layers in our currently active file. We also have the **History** palette tab, which allows us to see a list of actions performed on the currently active file and step backward in time to easily undo unwanted changes to the file. Finally, we have the **Auto Action** palette tab. Auto actions are recorded sets of processes that can then be carried out with the press of a button. We'll discuss auto actions in detail in *Chapter 17*, *Auto Actions and Your Workflow*.

Now that we have a better grasp of the default parts of the interface, we can learn how to move elements of the program around and customize it to suit our needs. Read on to learn more!

Moving, collapsing, and closing palettes

One of my favorite things about Clip Studio Paint is how customizable it is. Not only can we customize our tools, but we can also customize the interface of the program to make it look however we want it to look. This means that we can set up the program palettes and toolbars to give us the most efficient workflow and make our process as streamlined as possible. The process of moving, closing, and rearranging palettes is very easy, so let's get right to it.

Moving a palette

Let's start off by moving a palette to a new location in the Clip Studio Paint interface. I'll be working with the **Information** palette in this example, but this can be done with any palette you choose. Follow these steps to move a palette:

1. Locate the palette to be moved.
2. Put the mouse cursor over the name on the tab of the palette. The tab will be highlighted in blue when the mouse cursor is in the correct position.
3. Hold down the left mouse button to grab the palette, then move the mouse to drag the palette out of its position. The palette's new location will be shown in red, as shown in the following screenshot:

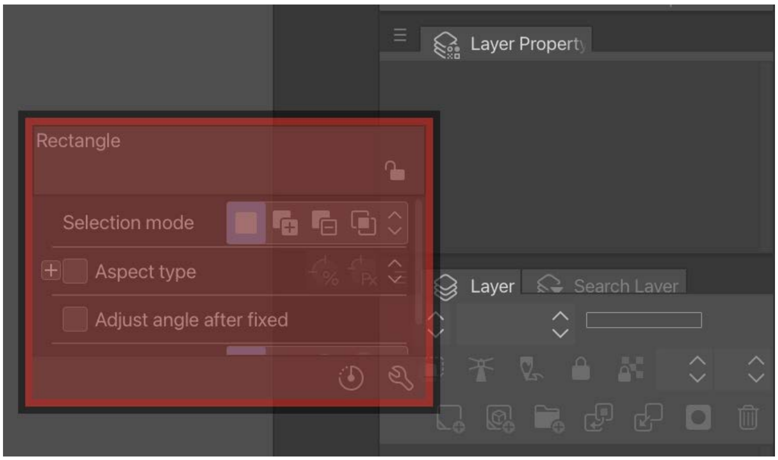


Figure 2.5 – Screenshot of the palette location

4. Drag the palette to the new desired location. A red line will appear when the palette is in line to be dropped in a new place in the interface, as shown by the red line below the **Navigator** palette in the following screenshot:

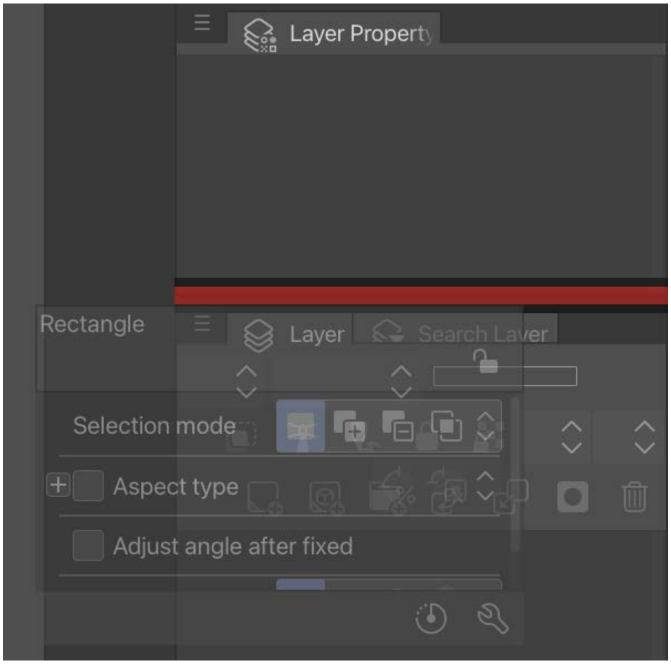


Figure 2.6 – Screenshot of the palette location 2

5. When the palette is in the desired new location, release the left mouse button to finish moving the palette. In the following screenshot, the **Information** palette is now below the **Navigator** palette:

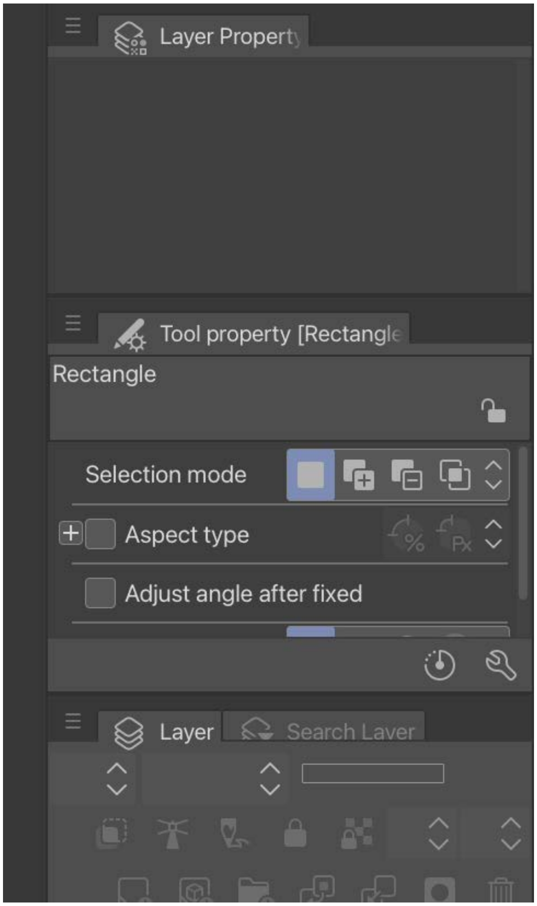


Figure 2.7 – Screenshot of the palette location 3

6. A palette can also be popped out of the interface by dragging the palette out to the canvas display window and releasing it when the palette is surrounded by a red rectangle. This will put the palette out on its own and not as part of the sidebars of the interface, as shown in the following screenshot:

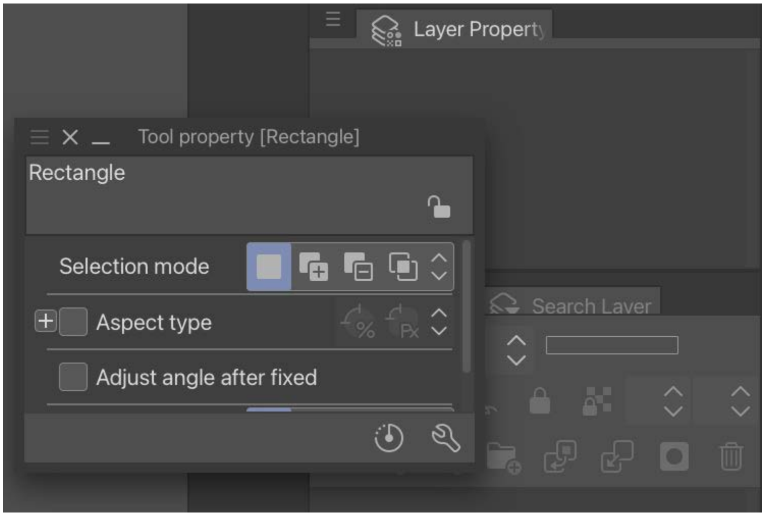


Figure 2.8 – Screenshot of the palette location 4

Closing a palette

There are two ways to close a palette that isn't needed. In this example, I will continue using the **Information** palette, because it's actually not a palette that I need to use and so I usually keep it closed anyway! Follow these simple steps to close a palette:

1. Follow the preceding instructions for moving a palette, and make sure to *pop out* the palette, as shown in *step 6*.
2. Click on the **X** button in the upper right-hand corner of the palette to close it.
3. To bring a palette back once it's been closed, simply go to **Window** in the **File** menu. Click on the name of the palette to show it again. Alternatively, the **Window** menu can also be used to close palettes by clicking on the names with checkmarks next to them.

Collapsing and expanding palettes

Clip Studio Paint also has the ability to temporarily hide entire banks of palettes and then bring them back when needed. In the following screenshot, the **Quick Access** and **Material** palettes are collapsed so that we can only see the category icons:



Figure 2.9 – Screenshot of the Quick Access and Material palettes

Let's learn how to expand and collapse these palettes by following these steps:

1. To fully expand the palette, click on the single left-facing arrow at the top of the palette window. The palette will expand, as shown in the following screenshot:

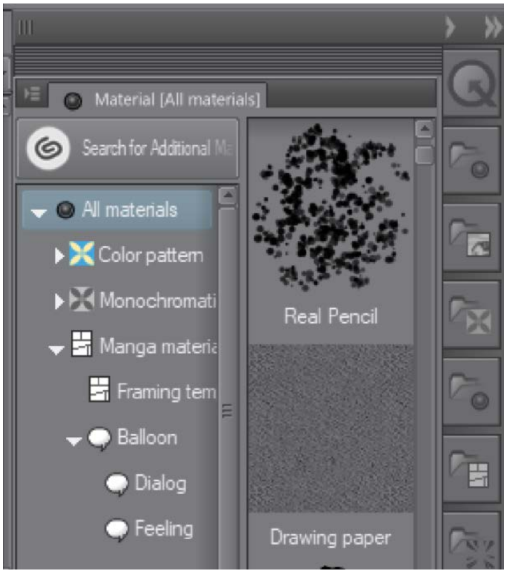


Figure 2.10 – Screenshot of an expanded palette

2. To collapse the palette back down to icons only, click on the single right-facing arrow at the top of the palette.
3. To fully collapse the palette, click on the double right-facing arrows at the top of the palette.

> **Tip**
> Remember that palettes on the left-hand side of the screen will have arrows facing the opposite direction, but they still perform the same function! They just collapse the palettes to the left instead of to the right. Collapsing palettes is a great way to give yourself more drawing space when on a small monitor, so be sure to use this if the interface is feeling cramped and you want to temporarily move things out of the way while creating your art!

The tool palette and Command Bar

Now that we've explored how to move palettes around, let's discuss the tool palette and Command Bar in more detail. Both of these parts of the Clip Studio Paint interface are very important and you'll be using them often, so let's get to know them before we start drawing.

The tool palette

The tool palette is found in the default interface down the left-hand side of the program. This is shown in the following screenshot:



Figure 2.11 – Screenshot of the tool palette

The tool palette gives us access to the various drawing and editing tools in Clip Studio Paint. The tools are separated into categories, designated by the horizontal lines going across the tool palette, and are divided into thirds.

In the top third of the tool palette are the selection and editing tools. From top to bottom, they are listed in the following order:

- Zoom
- Move
- Move layer
- Selection
- Auto select
- Eyedropper

The middle third of the tool palette consists mainly of our drawing and other mark-making tools. From top to bottom, they are listed in the following order:

- Eraser
- Pen
- Pencil
- Brush
- Airbrush
- Decoration
- Blend

The bottom third of the toolbar holds tools that do not necessarily fit into the other two categories. They are as follows:

- Fill
- Gradient
- Figure
- Frame border
- Ruler
- Operation
- Text
- Balloon
- Correct line

The very bottom of the tool palette shows the current foreground and background colors, as well as a transparent *color* that can be selected to allow mark-making tools to act like erasers. More information on this is in *Chapter 6*, *Erasers, Selections, and the Sub View Palette*.

It is best to think of the tool palette as a collection of categories of tools. Clicking on one of the icons in the tool palette will change the options available in the **Sub Tool** palette. The desired tool is then selected from the **Sub Tool** palette. You can think of the tool palette as drawers holding supplies in each one. For instance, if we clicked on the pencil in the tool palette, it is like opening a drawer where all of our pencils are stored. Then, we can select the specific pencil we want out of that category of pencils. It is always good to have the tool palette and **Sub Tool** palette open near each other to make tool selecting quick and easy.

Customizing the tool palette

Just like all the other parts of the Clip Studio Paint interface, the tool palette can be customized to suit our needs. Let's take a look at the different options we have to customize the toolbar.

Reordering tools

Just like the palettes of the interface, the tools in the toolbar can be moved around to suit our individual needs. For the following instructions, let's move the Pencil tool up above the Zoom tool, so that it is the first tool in the tool palette. Accomplish this by following these steps:

1. Click on the icon of the tool in the tool palette to be moved and hold down the left mouse button.
2. While holding down the button, drag the tool icon to the new location. A red line will show the current position.
3. Once the red line is in the new, desired place, release the mouse button.
4. To put the tool icon back in its previous place, repeat the preceding steps to move it again.

Renaming tools

Any of the tools in the tool palette can be renamed. To do this, complete the following steps:

1. Locate the icon of the tool to be renamed in the palette.

2. Right-click with the mouse on the icon to bring up the menu shown in the following screenshot:

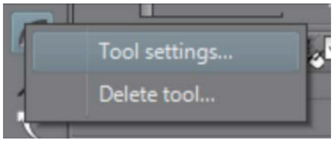


Figure 2.12 – Screenshot of renaming tools 1

3. Select **Tool settings…** from the menu. The following dialog box will appear:

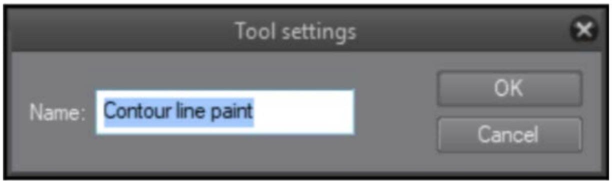


Figure 2.13 – Screenshot of renaming tools 2

4. In the text entry field, type in a new name for the tool.
5. To accept the name change, click **OK**. If you change your mind and don't wish to rename the tool, click **Cancel**.

Deleting tools

Sometimes, you just don't use a certain category of tools, and you don't want them cluttering up your space. With Clip Studio Paint, we can get rid of some of the visual clutter and delete tools that we don't use from the tool palette. Use the following steps to delete a tool and all of its sub tools:

1. Locate the icon of the tool to be deleted in the tool palette.
2. Right-click on the icon to bring up the menu shown in *step 2* of the *Renaming tools* section.
3. Select **Delete tool…** from the menu. The following message will appear:

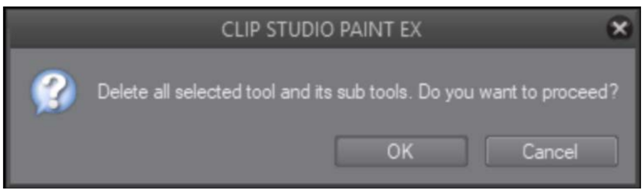


Figure 2.14 – Screenshot of deleting tools

4. To proceed with deleting the tool and all of its sub tools, click **OK**. If we've changed our mind and want to leave the tool icon in the tool palette, we can simply click **Cancel**.

> **Tip**
> If you accidentally delete an important default tool from the tool palette and need to get it back, click top left icon of the tool palette. It will bring up a tool menu, and select **Add from default...** to open **Add from default** dialog window. Select a tool from the tool list on the left of the window, and click **OK**. You can see the deleted tool is now back on the tool palette.

Now that we know all about customizing the tool palette, let's take a minute to talk about the Command Bar.

The primary Command Bar

The primary or permanent Command Bar is located between the **File** menu and the canvas display area. It is shown in the following screenshot:



Figure 2.15 – Screenshot of the Command Bar

The default options on the Command Bar in the preceding screenshot are as follows, from left to right:

- **New File**: Creates a new file.
- **Open File**: Opens an existing file.
- **Save File**: Saves the current file.
- **Undo**: Reverses the last action.
- **Redo**: Redoes an undone action.
- **Clear**: Deletes the current content (of a layer or of a selection).
- **Clear Outside Selection**: Deletes any content outside of the currently active selection.
- **Fill**: Fills in the current area with a foreground color.
- **Scale up/Scale down/Rotate**: Resizes or rotates the current layer or selection content.

- **Deselect**: Clears the active selection.
- **Invert selected area**: Reverses the selected area.
- **Show border of selected area**: Turns visibility of the selected area off and on.
- **Snap to ruler**: Toggles snapping when there is an active ruler.
- **Snap to special ruler**: Toggles snapping on a special ruler.
- **Snap to grid**: Toggles snapping on an active grid.
- **ClipStudio.net**: This is a direct link to the `https://www.clipstudio.net/en/` website for help or downloads.

We will discuss customizing the Command Bar in *Chapter 3*, *Pages and Panels to Shape Manga*.

Summary

In this chapter, you have learned how to obtain Clip Studio Paint and install it. You are familiar with the default interface, can move, close, and temporarily collapse menus and palettes, and know how to reorder tools in the tool palette. We have also taken a closer look at the Command Bar in the main menu and the Selection Launcher.

In the next chapter, we are going to take a look at the program's preferences and keyboard shortcuts before we get into our actual drawings. Read on to learn more!

3
Pages and Panels to Shape Manga

Now we've gotten Clip Studio Paint installed and have gone over the basics of the interface, in this chapter, we'll take a close look at your workspace, prepare a new file, and finally, set up panels on new pages. This is a process that is just like setting up a studio table to work on, choosing what paper to use, and knowing the correct tools to use to create panels.

In this chapter, we will cover the following topics:

- Making and saving workspaces
- Creating a custom-sized page and saving a preset
- Adding templates to a new file
- Making Comic Panels
- Creating new files and templates
- Using template panels and creating and editing them

Let's dive right in!

Making and saving workspaces

One of the best features of Clip Studio Paint is the ability to create and save different workspaces for different tasks. A workspace is a collection of palettes and their position on the interface. Clip Studio Paint comes with a few workspace options already in the program, but we can also create our own workspaces.

Saving a workspace

Follow these steps to create and save a workspace:

1. Use the directions in *Chapter 2*, *Installing Clip Studio Paint Pro and Interface Basics*, to move, collapse, and close palettes to set up a workspace. In the following screenshot, the palettes have all been moved to the left-hand side of the interface to make it easier to select items for a left-handed user:

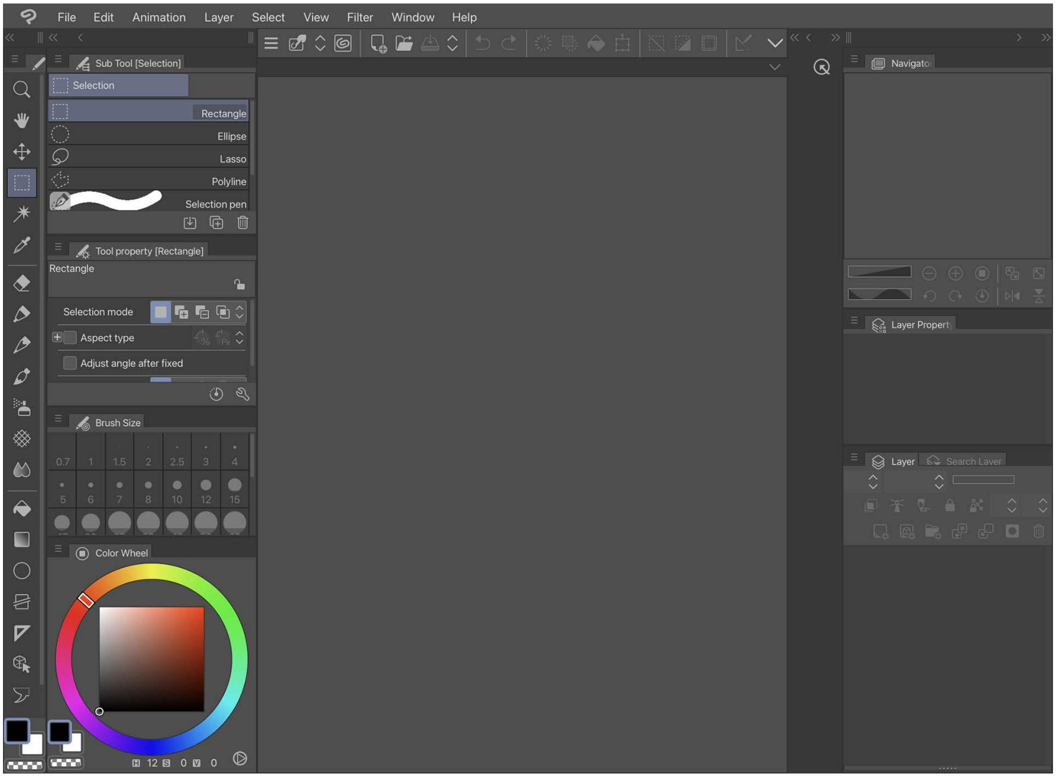


Figure 3.1 – A screenshot of a workspace

2. To save the current workspace, click on **Window** in the **File** menu, then go down to **Workspace** and click on **Register Workspace**. The following box will appear:

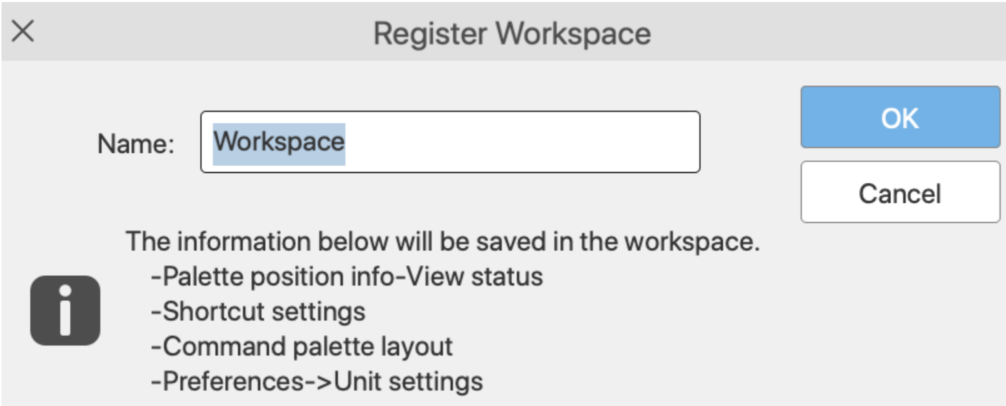


Figure 3.2 – A screenshot of the Register Workspace box

3. Enter a name for the workspace in the text entry box. Then, click **OK** to save the workspace settings.
4. Your workspace is now saved!

Switching between workspaces

Now that we've saved one of our own workspaces, we can switch to that workspace again whenever we like. Follow these steps to load a previously saved workspace:

1. Click on **Window** in the **File** menu, then go to **Workspace** to see the following options:

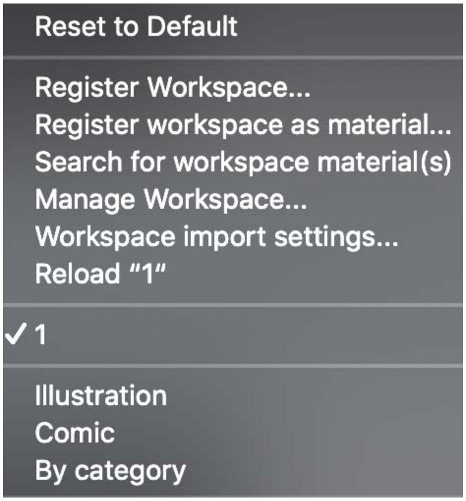


Figure 3.3 – A screenshot of the Workspace options

2. To switch back to the default workspace, click on the **Reset to Default** option.
3. To change to one of the workspaces included in Clip Studio, click on the **Illustration** or **Comic** option.
4. To load a custom workspace, locate it in the area above the **Illustration** and **Comic** workspace names and click on the name of the workspace to reload. In the preceding screenshot, it's the option named **1**.

The new workspace will be loaded.

Managing and deleting workspaces

Sometimes, you may want to rename or delete workspaces that you've saved. We can do this easily just by following these steps:

1. In the **File** menu, click on **Window | Workspace | Manage Workspace...**. The following menu will appear:

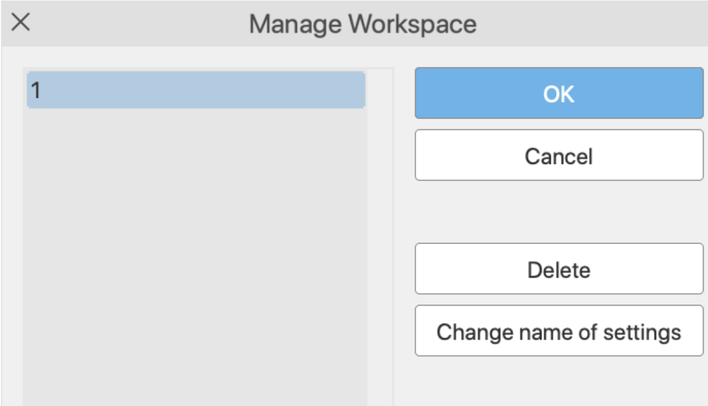


Figure 3.4 – A screenshot of the Manage Workspace box

2. To delete a workspace, click on the name of the workspace on the left-hand side of the menu to highlight it in blue. Then, click on the button marked **Delete** on the right-hand side.
3. To rename a workspace, click on the workspace name to highlight it in blue.
4. Then, click on the button on the right-hand side marked **Change name of settings**. Enter the new name for the workspace and click on **OK** to save the new name.

As you can see, it is easy to make new workspaces and change between them! Perhaps you want to make a workspace for drawing and inking, and another for coloring. The sky is the limit, so get creative with your workspaces and use them to maximize your workflow for efficiency.

In the next section, we'll start making new files and also learn about file templates.

New files and templates

Making a new file in most computer programs is pretty easy. But in Clip Studio Paint, there are some terms and options that need an explanation so that you are able to create new files that will have the right size and specifications for your projects. For anyone planning to print manga later, they can be very important. In this section, we will discuss the terms of creating a new file, and also learn how to create templates or load templates into new pages. Let's get started!

The New file window – explained

When first creating a new file in Clip Studio Paint, the number of options can look daunting. Not to worry though – in this section, we will explore each option in the new window and explain what each one means.

The following screenshot shows the **New file** dialog box. Note that if you are using Clip Studio Paint Pro, you will not have the **Multiple pages** or **Cover page** settings that are available in Clip Studio Paint EX:

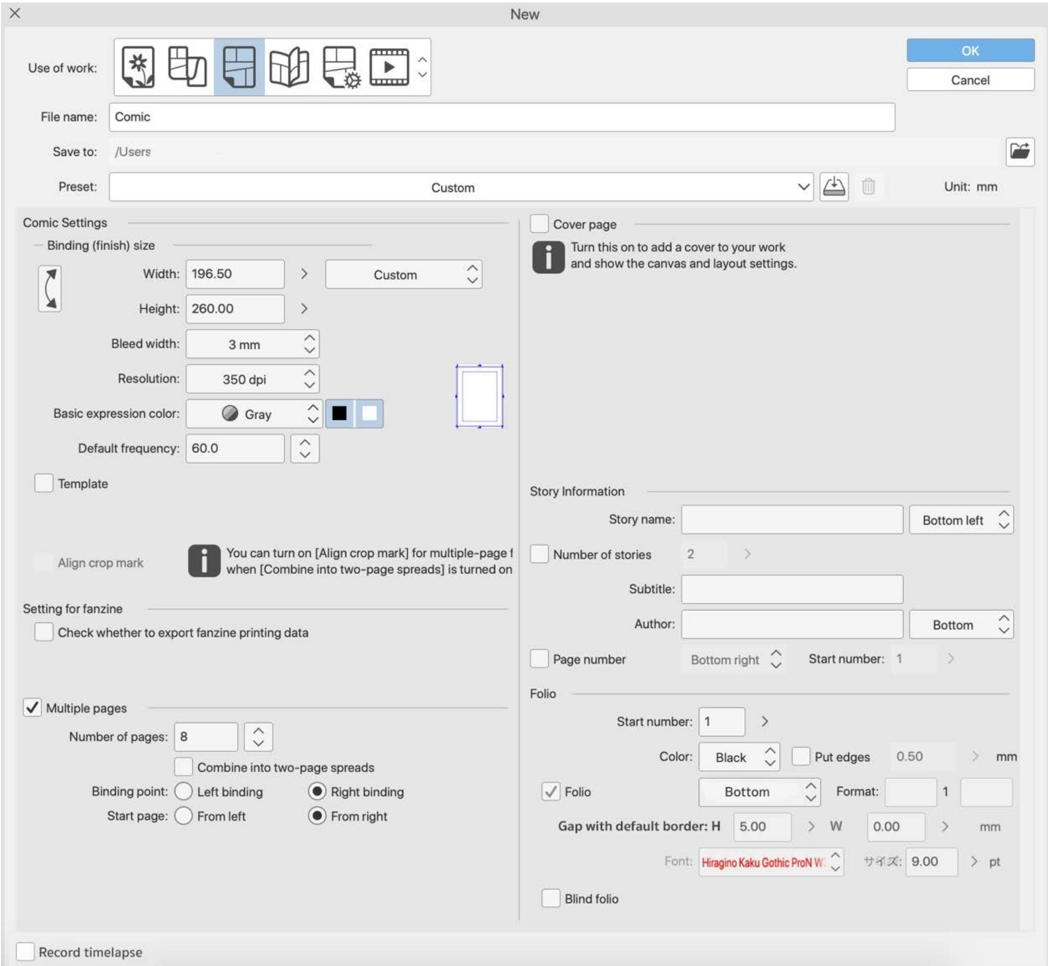


Figure 3.5 – A screenshot of the New file window

Wow, that's a lot of options! It can look scary at first, but let's break it down piece by piece and talk about each option individually so that we know what they all do:

- **Use of work** is the area where we can select a category from preset document options.

  The categories are **Illustration**, **Webtoon**, **Comic**, **Printing of fanzine**, **Show all comic settings**, and **Animation**. Clicking on one of these categories changes the available settings as well as the presets, depending on which **Use of work** category is selected. For instance, selecting the **Illustration** category hides any settings related to making a comic.

  We will look closely at the **Webtoon** category in *Chapter 19*, *Exporting, Printing, and Uploading Your Manga*.

- **File name** is a textbox where the name of the file can be added. This field must be filled in when making multiple page files.
- **Save to** is the folder where a multiple-page file is saved to. To change the destination folder, click on the **Browse** button to the right of the current file path.
- **Preset** is a drop-down menu of preset page sizes and settings that correspond to the current selection made in the **Use of work** section. This is also where any user-made page presets will appear. We'll learn more about saving our page settings in an upcoming section.
- **Unit** is where we can set the unit of measurement for the page. In the preceding screenshot, it is set to **mm**. It can be set to **cm**, **in**, **px**, or **pt** via the drop-down menu.

  In the **Canvas** section, we have several options. The **Width** and **Height** are the measurements of the new canvas that will be produced, in whatever unit of measurement is set in the **Unit** drop-down menu. These can be adjusted either via the arrows to the right of the textbox, or we can click inside the box and simply type in a new measurement. To switch the measurements for the height and width, click on the curved double-headed arrow button to the left of the **Width** and **Height** boxes.

- **Resolution** is where you can set the resolution in dpi for the new document. For print projects, this should be at least 300 dpi.

> **Tip**
>
> Create all of your projects in at least 300 dpi (or larger, if your computer can handle it!) so that you never have to redo something if you decide after making it that you want to print it. Images with low resolution will look pixelated and blurry when printed.

- **Basic expression color** is where you can set the default expression color of the image. **Basic expression color** can be changed via individual layers in the image later, no matter what the expression color is set to during this step. However, if you are creating a pure black and white or grayscale image, it can save time (and file space!).
- **Paper Color** is where you can set a default paper color. Activating the checkbox here will create a **Paper** layer in the file with the indicated paper color as a fill. This paper color can be edited later. If the paper color is not active, then the new file will be transparent.
- **Template** is the checkbox where we can load a template into the new file. We'll discuss templates more in the next section.
- The **Comic settings** section activates the **Binding (finish) size** and border size options. Let's discuss the **Binding (finish) size** and border size options in more detail.
- **Binding (finish) size** is the dimensions of the finished page after printing. In printing, we have a bleed area that is cut off the edges of paper after documents are printed. This is how a full bleed (an image going off the edge of the paper) is achieved. The **Width** and **Height** settings in the Canvas area should be the paper size, including any bleed area. The **Binding (finish) size Width** and **Height** should be the finished dimensions of the page after trimming has occurred. For instance, if you have a 6 x 9-inch finished page with a .25 inch bleed margin, then we would need to add .25 inches to all four sides of the paper. This makes our canvas **Width** and **Height** 6.5 x 9.5 inches, but our **Binding (finish) size** is 6 x 9 inches. Preset finish sizes can be selected from the drop-down menu or entered manually via the text entry boxes.

- **Default border (inner) size** is the size of the margin on the finished page. This is sometimes called the safe area. We want to keep any important elements of the art in a comic or other printed design away from the very edges of the page, especially when doing a bleed. This is because the very edges of the paper are cut down to the finished size, and sometimes those cuts aren't precise. Having text or other important elements too close to the edge can result in those things getting cut off! As with the binding size, the border size can be selected from the drop-down menu or entered manually in the textboxes.
- **X offset and Y offset** is used to offset the border to the left, right, up, or down. This feature is very handy if you need to move the margins to the left or right to compensate for the binding of a book, or if you want to move the inner border up slightly to allow for page numbers or notes at the bottom of the page.
- **Setting for fanzine** is used to export work with data capable of being used by a fanzine printer. This option is used mainly for Japanese doujinshi.
- **Multiple pages** is an option that's only available in Clip Studio Paint EX. Checking this box allows you to make a file with multiple page files nested in it. This option is invaluable for anyone making longer-chapter comics. By using a multiple-page file, you can look at all the pages in the file at once, check the flow of the work, and rearrange, delete, or add pages.
- The **Number of pages** box controls how many pages should be created in the new file, and can be selected either using the downward pointing arrow to the right of the text entry box or a number can be typed in manually. The **Combine into two-page spreads checkbox** will turn facing pages into a two-page spread automatically. **Binding point** controls which side of the book the binding will be on. For instance, English books are bound with the spine on the left-hand side while Japanese books have the spine on the right.

  When creating a multiple-page file, the **Cover page** option can be used. When active, this creates a front and back cover for the file. Note that these covers are included in the page count. Therefore, a 32-page file will yield 28 inner pages, a front outside cover, a front inside cover, a back inside cover, and a back outside cover. **Resolution**, **Basic expression color**, Paper color, and **Template** can also be set for the cover, just as with the Canvas.

There are also two options for the **Cover page layout**. The first icon is to make the cover a two-page spread so that the back and front of the cover are one continuous page and can both be designed and drawn on at the same time. When this option is selected, the **Specify spine width** option can be used to set the width of the spine of the finished book so that the appropriate width spine can be added to the cover. The icon on the right under the Cover page layout separates the cover pages into individual pages.

- The **Story Information** section of the **New** file window is optional but can be very helpful, especially if working with a team or when sending files out to a printer. **Story name** allows you to enter the name of your story. The drop-down menu to the right of the text entry box controls where the story name will appear on the new page. By activating the **Number of stories** checkbox, the number of the current story can be entered.
- The **Subtitle** textbox can be used to add any additional title information. The **Author** box can be used to add the name of the author of the comic story, and the drop-down menu to the right can be used to determine where on the page to display the author's name. By activating the **Page number** checkbox, a page number will be displayed automatically in the bleed area of the pages. The drop-down menu to the right of the **Page number** checkbox can be used to control where to display this number. The **Start number** box is used to indicate what number should be the first in the number series.
- The **Folio** section of the **New File** window is where folio information can be added to new pages. Folio is another name for page numbering. The **Folio** option will leave visible page numbers on the new pages, inside of the bleed area. **Start number** allows us to set the number to begin the page numbering with. The color of the page number can be set with the **Color** drop-down menu. To add a stroke to the outside of the page numbers, activate the **Put edges** checkbox and then indicate the desired thickness of the outline in the text entry box to the right. The **Folio** checkbox is used to activate the **Folio** options and indicate that folio information should be included in the new file.

The drop-down menu to the right of the checkbox allows you to customize where the page number shows up on the page. The **Format** text entry boxes are used to format any text around the page number (for instance, Page 1 of 35 could be entered in the text entry boxes). **Gap with default border** is used to set the gap between the folio information and the default border of the page. The larger the number in the gap options, the larger the space between the folio information and the default borderline will be. The **Font** drop-down menu allows us to set the desired font to use for the folio information, and the **Size** option next to it sets the size of the folio text. The following is a screenshot of the **Folio** section:

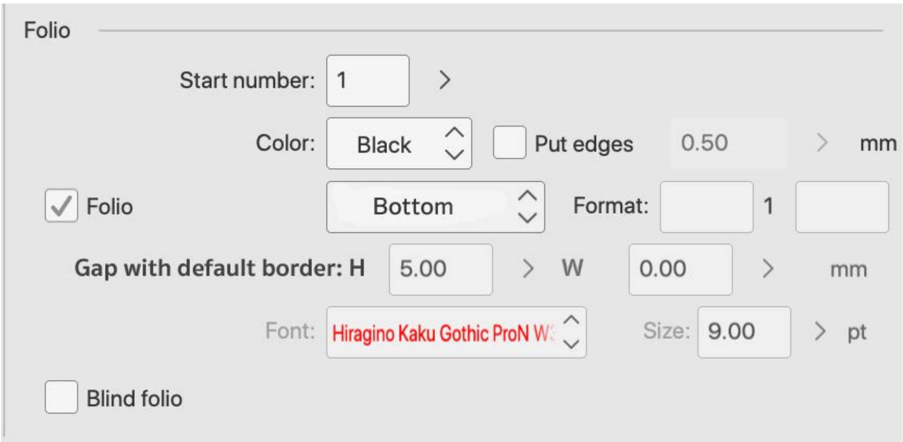


Figure 3.6 – A screenshot of the Folio section of the New File window

There is a **Blind folio** checkbox underneath. **Blind folio** puts a page number on the inside edge of the page, where the spine would be when the pages are bound into a book. These folio numbers are not visible when the book is bound. Finally, if you wish to record a timelapse of your manga creation, click the **Record timelapse** checkbox at the very bottom of the window underneath the **Multiple pages** section, as shown in the following screenshot. It will allow you to record and share the timelapse:

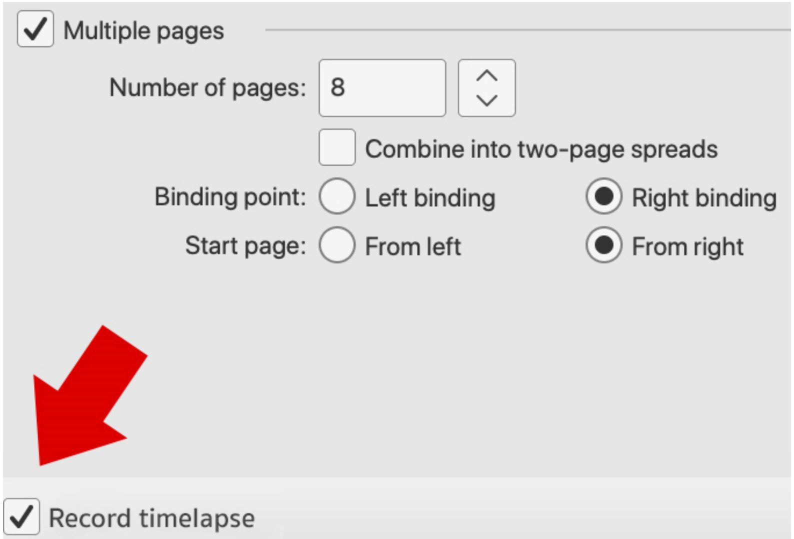


Figure 3.7 – A screenshot of the Timelapse section of the New File window

Now that we know what all of these terms and options are, we can make a new page! In the next section, we are going to create a custom page, sized to the standard American comic book size paper with the recommended margins. We will save this page as a preset and then create a new file with a template added to it as well. Let's get started!

Creating a custom-sized page and saving a preset

Aside from the Japanese or European comic sizes, Clip Studio Paint doesn't come with the sizes that are common to American comic books. We are going to create a standard American comic book size page for creating new files and save it as a preset for use later. Follow these steps to complete this activity:

1. Go to **File | New** or press *Ctrl + N* to open the **New** dialog box.
2. In the **Use of work** section, click on the **Show all comic settings** icon.
3. Change the **Unit** drop-down menu to the right of the **Preset** dropdown to **in** (inches).
4. In the **Width** entry box, enter `7.00`.
5. In the **Height** entry box, enter `10.50`.
6. Set **Resolution** to **300** dpi (or more, depending on your computer hardware).
7. Set **Basic expression color**. I usually leave this as **Color**, but if the majority of your work is in black and white or grayscale, you may wish to choose a different mode. Individual layers can be adjusted later in the file, so even if we choose the Grayscale mode in this step, we will still be able to color our work later if we decide to.
8. Set **Paper Color** by clicking on the checkbox if it's not checked already, then click on the color selector box to choose the paper color. For this example, we will be leaving the paper color white.
9. Click the checkbox next to **Comic settings** to activate it if it is not already active. In **Binding (finish) size**, enter `6.75` for **Width** and `10.25` for **Height**.
10. Enter a **Bleed width** of `0.10`.

11. Under **Default border (inner) size**, enter `6.25` for **Width**. Enter `9.75` for **Height**. Leave **X offset** and **Y offset** both at `0.00`. Your settings should look like what's shown in the following screenshot:

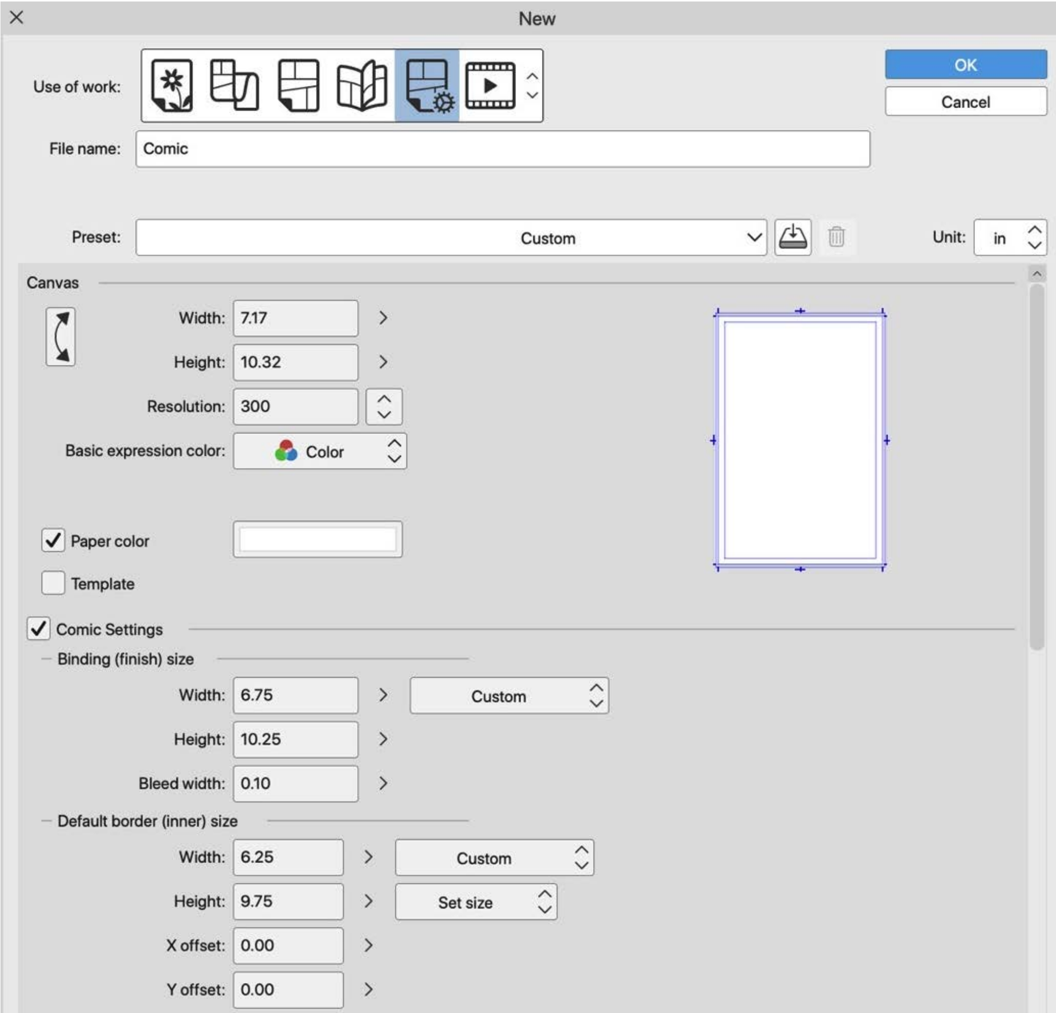


Figure 3.8 – A screenshot of the New comic settings window

12. Now, we will save this set of page settings as a preset so that we can use it again later. To do this, click on the **Save** icon to the right of the **Preset** drop-down menu. This will bring up the **Register to preset** window, which is shown in the following screenshot:

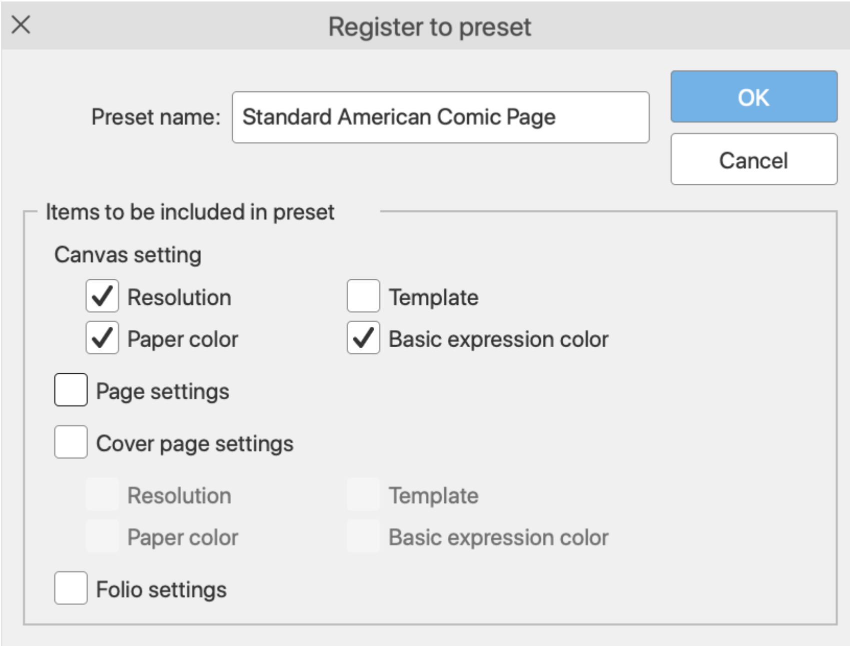


Figure 3.9 – A screenshot of the Register to preset window

13. Enter a name for the new preset in the **Preset name** box. Use the checkboxes to indicate which settings should be saved. When finished, click on **OK** to save the preset.
14. The new preset will be in the **Preset** drop-down menu and ready to use for future projects!

In the next section, we will learn about adding templates to our files.

Adding templates to a new file

Templates can save a lot of time. For instance, if you are making a series of comics that all have the same four-panel layout, then by using Clip Studio Paint EX, you can make a multiple-page file and load the four panels into every page of the file upon creation, saving valuable time! No matter whether you're using the Pro or the EX version, though, using templates can save a lot of tedious work. So, let's learn how to load a page template into a new file by following these simple steps:

1. Open the **New** dialog box by going to **File | New** (or press *Ctrl* + *N*).
2. If you saved the preset page from the previous exercise, now is a great time to try it out by selecting it from the **Preset** drop-down menu.
3. Under the **Canvas** section, click the checkbox next to the word **Template**. This will bring up the **Template** dialog box.
4. Scroll down through the template selections to find the desired template. For this example, we will be using the **4 frames 2 strips with titles** template. Click on the template to select it.
5. Click on **OK** in the **Template** window. Now, the chosen template will be shown next to the **Template** checkbox. To change to a different template, click on the button with the name of the current template on it to bring the **Template** dialog box up again.
6. For EX users, check the box next to the **Multiple pages** option. In the drop-down menu, select **8** as the number of pages. Add a title in the **File name** textbox at the top of the window, and choose a folder to save the new file in.
7. Your screen should now look something like the following screenshot. Click on **OK** to create the new file:

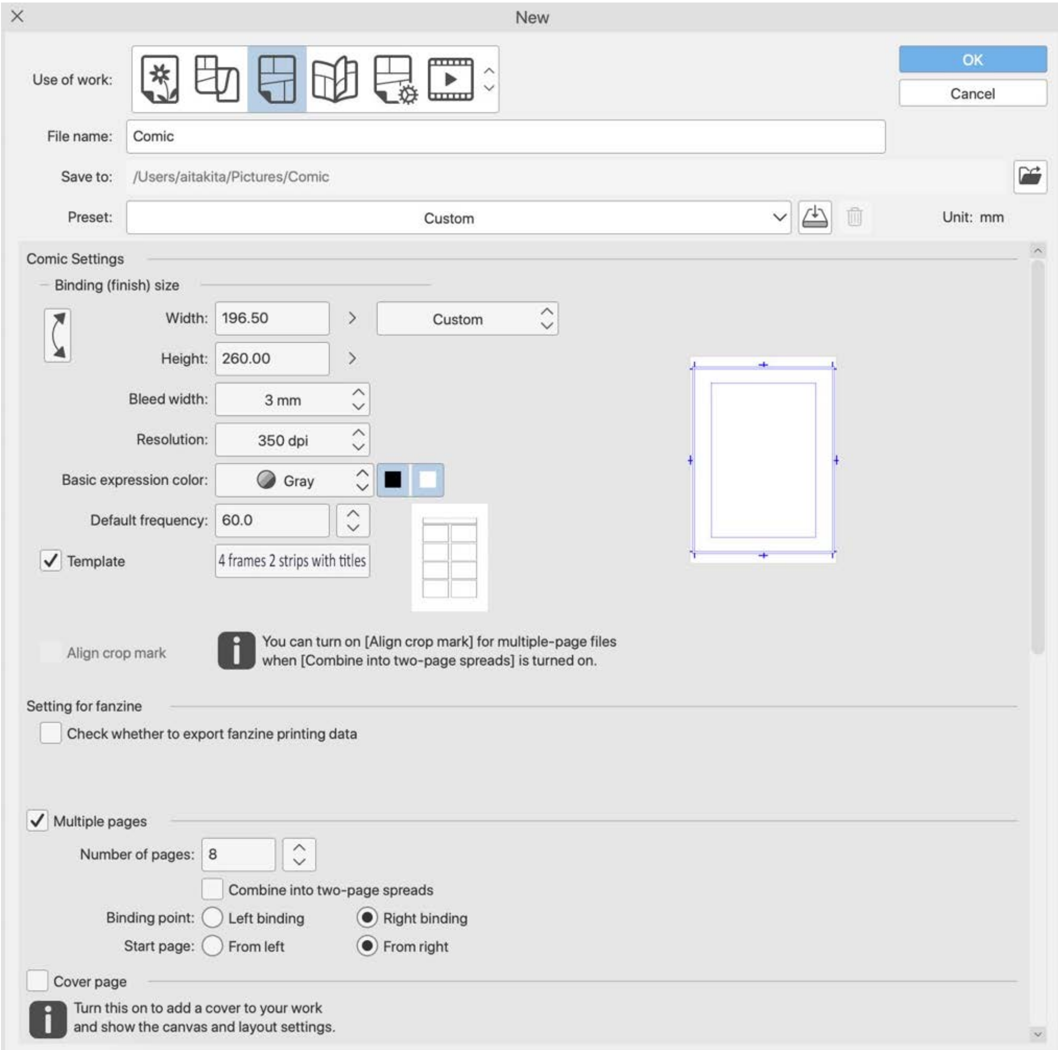


Figure 3.10 – A screenshot of the New comic page window

Tip

Creating a file with multiple pages can take a few seconds to a few minutes, depending on the number of pages and the speed of your computer system.

Be patient!

The following screenshot shows our eight-page file with the framing template we chose on each page:

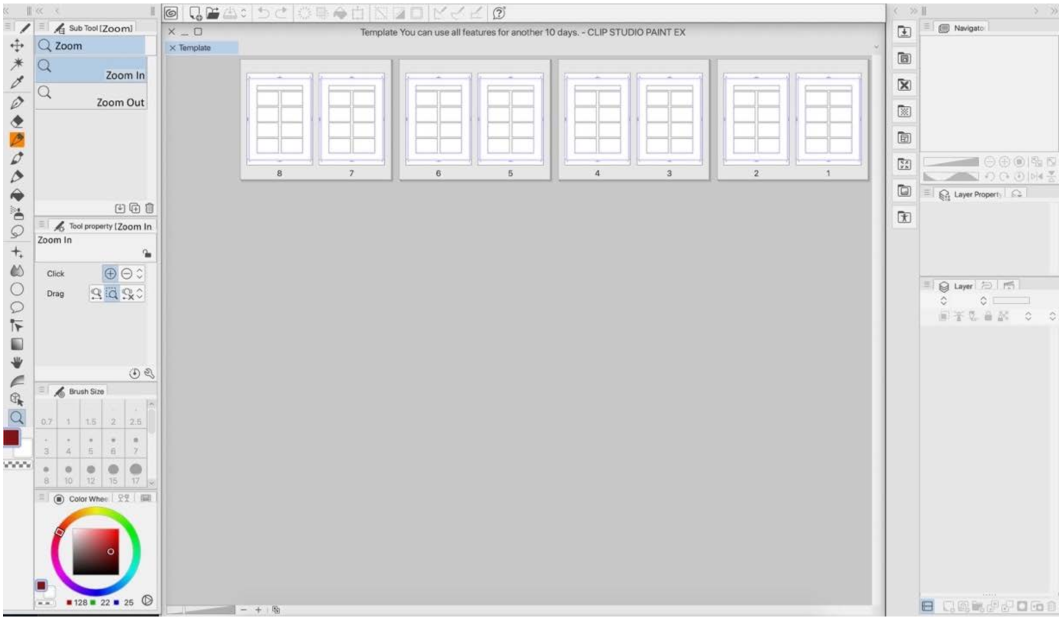


Figure 3.11 – A screenshot of a multiple-page window

Wow, now you have comic pages in front of you to work on! And you know how to use panel templates. Shall we proceed to the next stage – making your own comic panels?

Making Comic Panels

It's always fast to use already prepared templates for manga panels, but if you need to create your own, there is a variety of tools and options for frame border layers. These frame borders make comic panels – the individual boxes that each piece of sequential art in a story is drawn inside of. These frame border layers can be created easily, edited in just a few clicks, and even set to mask out any content outside of the panel –which makes for a much easier drawing experience. If you want to know generally about layers, find more in *Chapter 5*, *Penciling: Layer and Layer Property Palettes*.

For now, let's start making some comic panels!

What are frame border layers?

First of all, frame border layers are what Clip Studio Paint calls the specific type of layers that it makes comic panels from. Panels in comics are like shots in a movie or TV show. They contain the action and can also give a sense of the amount of time that's passed or how much weight the action carries. Panels can also bring lots of drama and excitement to a page and can lead the reader's eye around the composition, telling them what is important and what they should be looking at.

Panel layouts can be straightforward or much more constructive. Let's take a look at a few comic panel examples, along with the way that their frame border layers are laid out in the **Layer** palette.

Here is the first example:

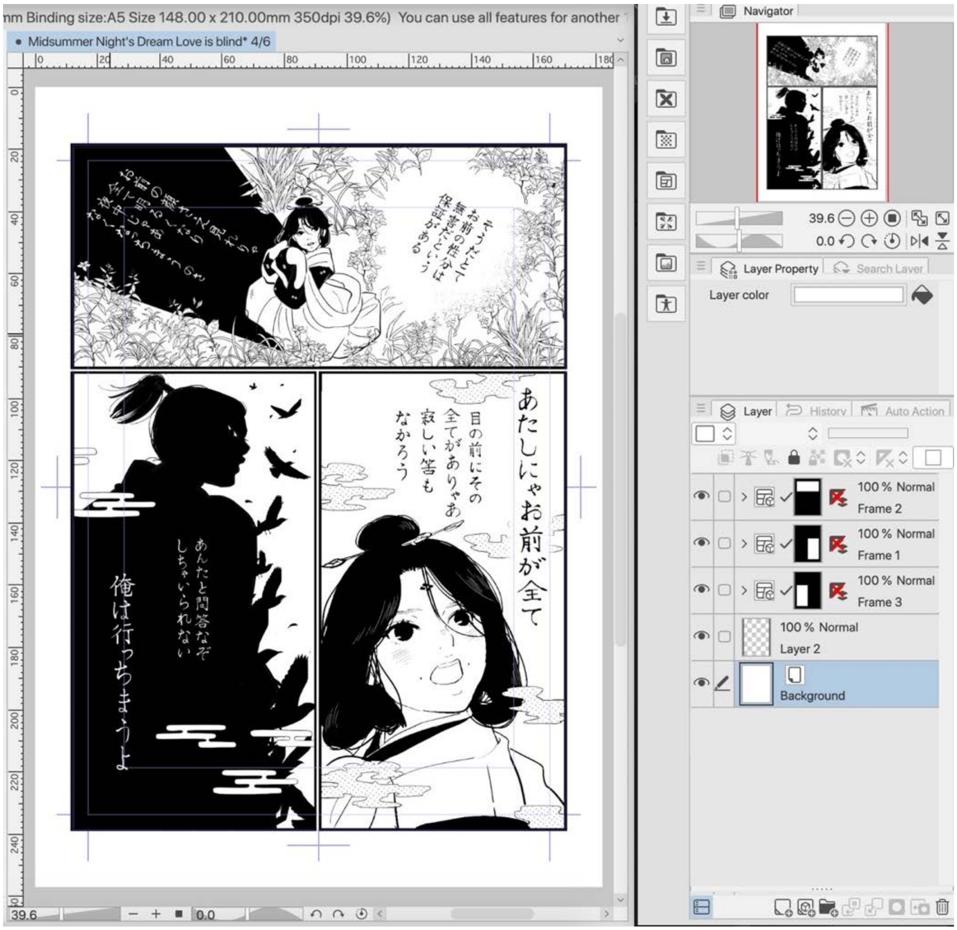


Figure 3.12 – A screenshot of a manga page and the Layer palette 1

In the **Layer** palette at the bottom-right of the screenshot, you will see the various frames of the comic. Each panel is created in its own frame or frame border folder, and you can tell which panel it is by looking at the black and white mask of each of the layers. (For more information on layer masks, see *Chapter 12*, *Making Layer Masks and Screentones*.) The following screenshot shows another example of comic paneling:

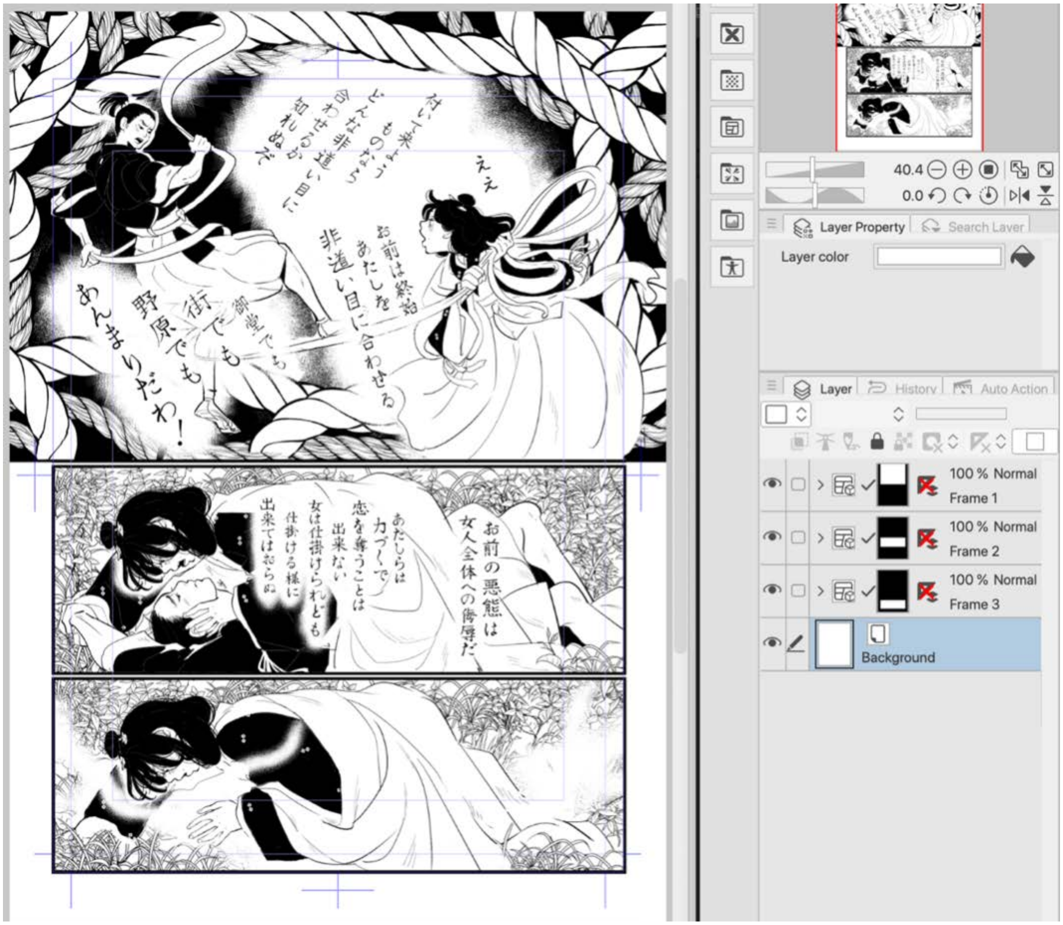


Figure 3.13 – A screenshot of a manga page and the Layer palette 2

In the preceding example, the bottom two frames stay within the inner border of the page, but the top panel has been extended out beyond the margins. This is called a **bleed**, and it refers to any art that goes off the edge of the page. When printed, the paper will be trimmed down to the final finished size so that there is no white margin around the edge of the paper. This trimming of the paper after printing occurs in traditional book publishing, which is why we must always keep the interior margins of the page (**Default Bordersize** in the **New** file options in Clip Studio Paint – see *Chapter 2*, *Installing Clip Studio Paint Pro and Interface Basics*, for more information on creating a new file) in mind. Artwork, text, and anything else that is too close to the edge of the page is at risk of being cut off in the trimming process, so it is a good idea to keep anything important, such as dialog and speech balloons, inside the inner margins at all times.

Here is a third example of a comic panel layout, along with its corresponding **Layer** palette from Clip Studio Paint:

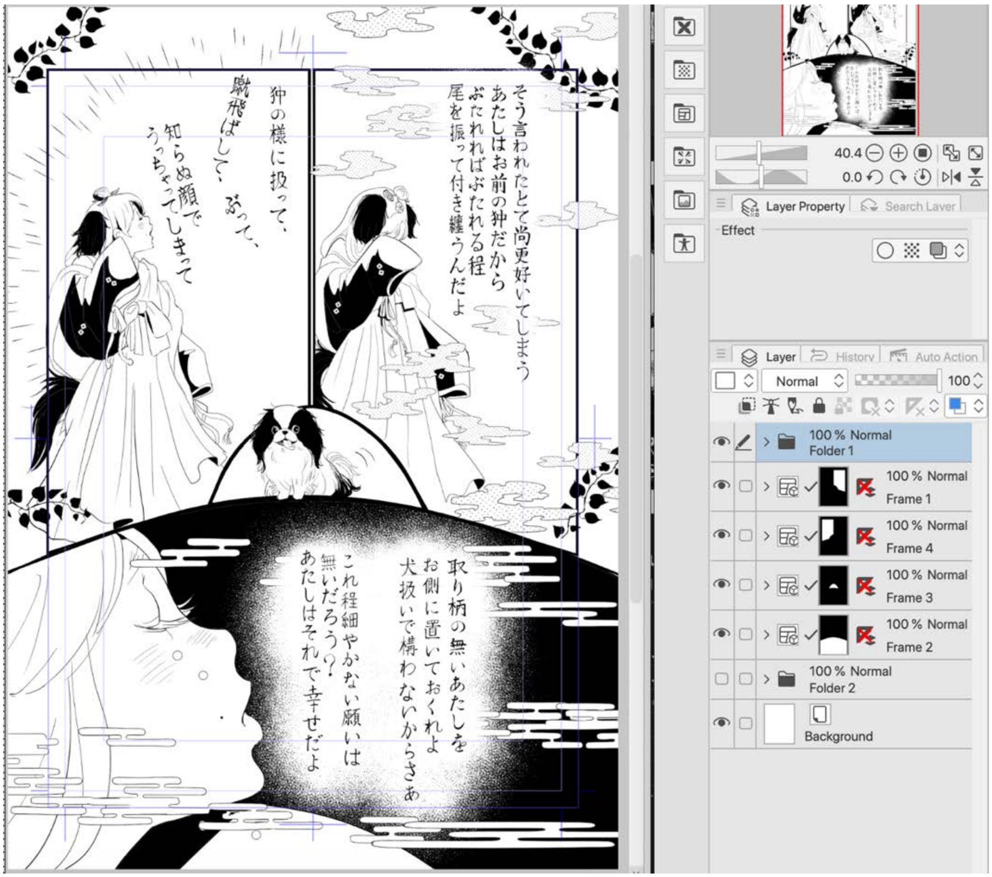


Figure 3.14 – A screenshot of a manga page and the Layer palette 3

The bottom two panels are round shapes that soften the impression of the page. Believe it or not, this set of panels was just as easy to create as the other panel examples; it just required a little bit of pre-planning to keep everything together!

Of course, these three examples do not cover the entire spectrum of comic book paneling. Just like shooting a movie, there are countless ways to tell a story. Page compositions depend on the style of the artist and the type of story they are telling to inform the style of paneling.

So, now that we've talked about panels and what they are, let's get into the tools we use to make them.

Creating, editing, and using template panels

In order to create frame border panels, you will need an open page. I recommend using one of the templates under the comic category to test out the panel creation tools, but use any size canvas that you feel comfortable with! I recommend the comic templates because they already have the inner border size set, so it's easy to see where you should keep the panels to avoid them getting cut off.

Before we get into actually creating some panels, let's take a look at the sub tools used to make them and some of the options for those sub tools. The **Frame Border** sub tools can be found under the **Figure** category of tools in the toolbar. These sub tools are shown in the following screenshot:

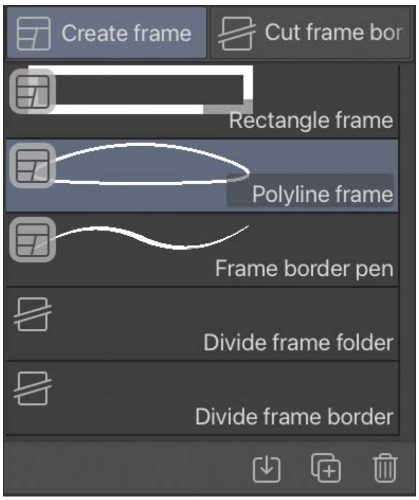


Figure 3.15 – A screenshot of the Create frame sub tools

In this section, we are going to concentrate on the **Rectangle frame**, **Polyline frame**, and **Frame border pen** tools. We will discuss the other two types of sub tools in the *Dividing and editing panels* section coming up later in this chapter.

The following screenshot shows the **Tool property** options for the **Rectangle frame** sub tool:

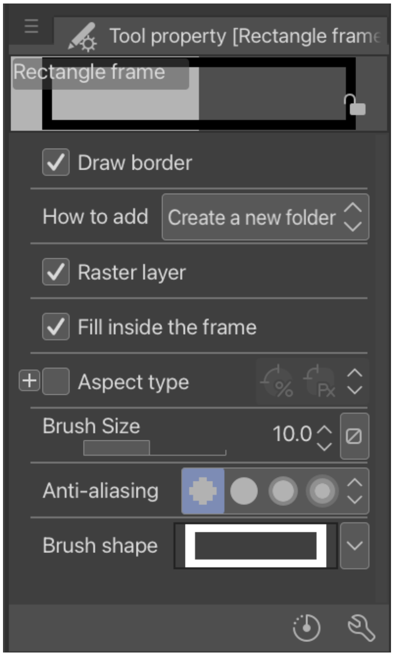


Figure 3.16 – A screenshot of the Rectangle Frame sub tool

The list that follows provides details about each of these options:

- **Draw border**: This checkbox controls whether a line is drawn around the outside of the created frame or not. When unchecked, Clip Studio Paint will create a panel with no outline.
- **How to add**: The options under this drop-down menu are **Create a new folder** and **Add to selected folder**. Depending on the setting selected, new panels will either be made in a folder of their own or will be created all in the same folder. We will discuss this more in the next section of this chapter.
- **Raster layer**: When checked, this option will automatically create a new raster layer underneath the new panel folder.
- **Fill inside the frame**: Automatically creates a background fill layer in the new frame.

- **Aspect type**: When checked, this option controls the aspect ratio of the created panel with either a set ratio or a set length. For example, to create frames that are all exactly the same size, that size can be specified by setting **Width** and **Height** under the **Set Length** option.
- **Brush Size**: Controls the thickness of the created border outline.
- **Anti-aliasing**: Sets the anti-aliasing of the border outline.
- **Brush shape**: Controls the brush used to draw the outside border. For example, a border of dashed lines or hearts can be set using this drop-down menu.

Now that we know a little about the panel options, let's create some panels using the first three sub tools in the **Frame border** category.

Using the Rectangle frame tool

Follow these steps to create a comic panel using the **Rectangle frame** tool:

1. Select the **Rectangle frame** tool from the **Frame border** category.
2. Edit the tool properties to your desired settings.
3. Decide where you want your panel to be located on your open page.
4. Click and hold down the mouse button or stylus where you want the panel to begin.
5. Drag to create the panel and release when the panel is the desired shape and size.
6. Repeat to create additional panels.

The **Rectangle frame** tool can be used to create circle- and polygon-shaped panels, as well as squares and rectangles. Simply click on the icon at the bottom of the Tool property palette to bring up the following screen:

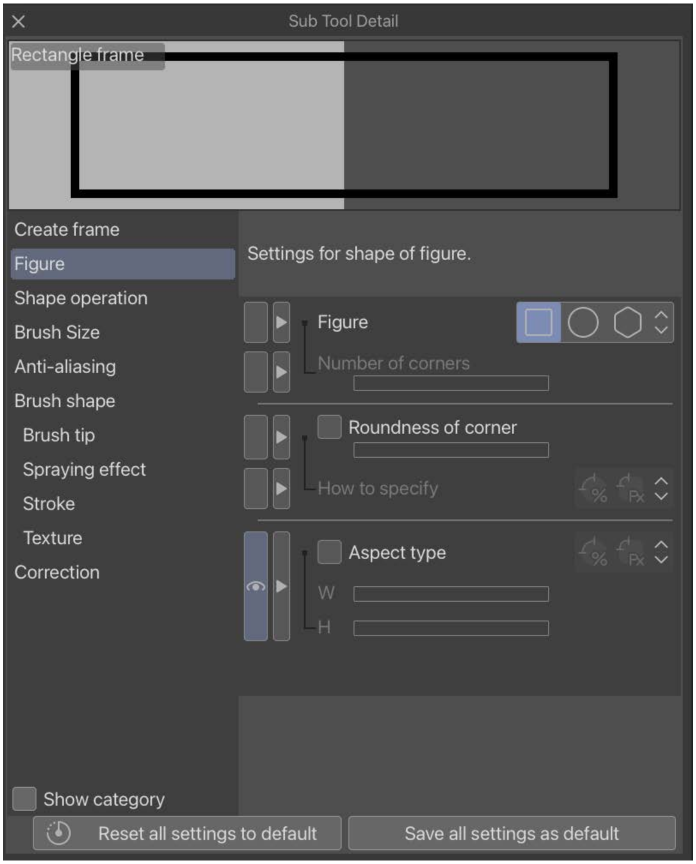


Figure 3.17 – A screenshot of the Create frame sub tool detail

Under the **Figure** options, you will find icons to change the shape to a circle or a polygon, as shown in the preceding screenshot.

> **Tip**
>
> Want to see options from the **Sub Tool Detail** screen in the Tool property palette for easier access? Click on the box to the left of the option name to turn on the eye icon. Any options with the eye icon next to them will be available in the Tool property palette.

Using the Polyline frame tool

The **Polyline frame** tool allows us to create more complicated and irregularly shaped frames.

Select the **Polyline frame** tool and look at the **Tool property** palette. If the **Curve** options are not visible, they can be accessed through the **Sub Tool Detail** palette, as shown in the following screenshot:

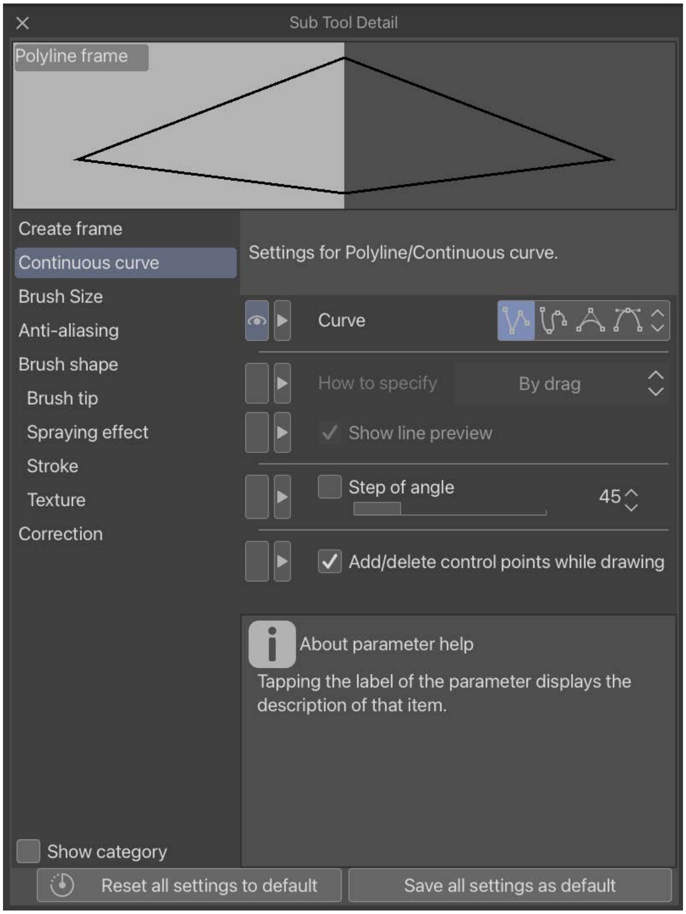


Figure 3.18 – A screenshot of the Create frame sub tool detail panel

The very first icon will produce straight lines between the points of your frame, and the second option is the **Spline** setting, which will create curves between each point of the frame. To use either of these options, simply click on the point in the canvas where you want the frame to start. Then, click again where the second point should be. Continue clicking on each corner of the frame until you reach the starting point, and double-click to finish the frame.

A frame made using the **Straight line** option is shown in the following screenshot:

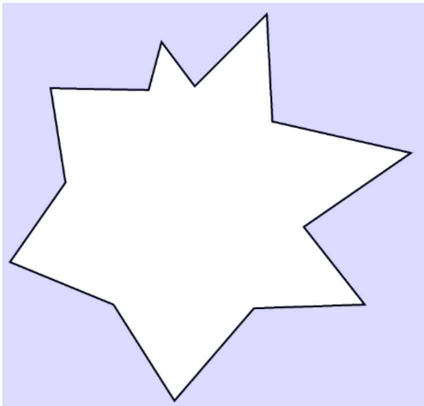


Figure 3.19 – A screenshot of a frame made using the Straight line option

It can take a little time to try out the **Polyline frame** tool if you are using it for the first time. But don't worry, just try step by step, then you will have perfect control of the tool!

Using the Quadratic Bezier option

Using the **Quadratic Bezier** option for a panel takes a little getting used to and usually requires some refinement after the initial points are laid out. Follow these steps to create a curved panel with Quadratic Bezier:

1. Select **Polyline frame** and then the Quadratic Bezier option from the **Tool property** palette.
2. Click on the canvas once, at the point where you'd like the frame to start.
3. Click on the point where you would like the frame to start curving. This will create a small square handle at the clicked point.
4. Move the cursor to another point on the canvas. The line of the frame will bend according to where the second click was placed and where the cursor is now.

5. Continue clicking to add boxes and curves to the frame until it is the desired length. Double-click to end the frame when the starting point is reached.
6. To adjust the frame, select the **Operation** category of tools and then the **Object** tool. Click on the frame outline to select it and reveal the handle controls. In the following screenshot, the control handles are on the straight lines and the frame is the curved lines:

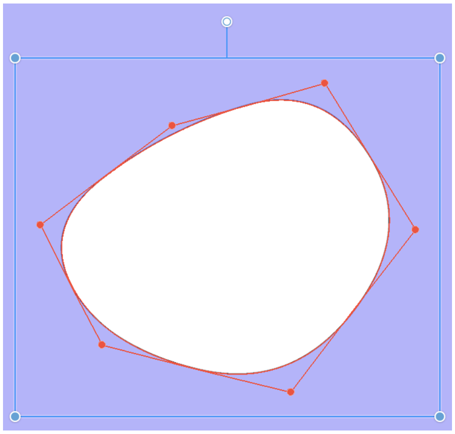


Figure 3.20 – A screenshot of a frame made using the Quadratic Bezier line option

This tool has its own way of handling them. You can try moving each point to see how the tool modifies the shape!

Using the Cubic Bezier option

Another option for making curved frames is using the Cubic Bezier setting. Follow these steps to create a frame using Cubic Bezier:

1. Select the **Cubic Bezier** setting from the **Tool property** palette of the **Polyline frame** tool.
2. Click on the first point of the frame.
3. When clicking to add the first curve, hold down the mouse button and drag it in the direction your line is going. (For example, if you are starting on the left-hand side of the canvas and heading toward the right, drag the mouse to the right while holding down the button. Going in the direction of the line will prevent the control handles from getting reversed and making "snarls" in the line.) The line between the two clicked points will curve.

4. Click on a third point and drag with the mouse while holding down the button to continue making the curve.
5. To end the frame creation process, click on the starting point to enclose the frame.
6. To edit the Cubic Bezier frame, select the **Operation** category of tools and select the **Object** tool. Click on the frame to reveal the control handles. The control handles are shown by the red lines in the following screenshot:

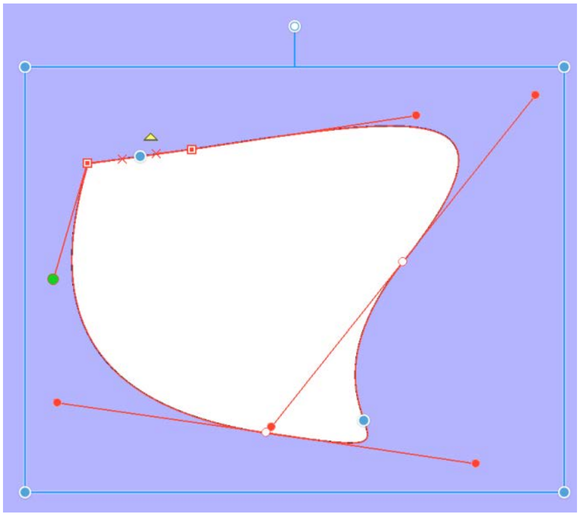


Figure 3.21 – A screenshot of a frame made using the Cubic Bezier line option

Cubic Bezier has got a unique function with the red handles, and they make it possible to create the exact smooth shape you need!

Using the Frame border pen

The **Frame border pen** is a versatile tool that allows you to freehand any shape into a frame border. It's so easy to use!

Follow these steps to create a frame with the Frame border pen:

1. Select the **Frame border pen** sub tool from the **Frame border** category.
2. Using the mouse or tablet stylus, draw the desired shape for the panel outline.
3. When the entire shape is enclosed, release the pressure on the mouse button or stylus tip to complete the frame creation process.

4. As shown in the following screenshot, more complex frame shapes can be made with the Frame border pen tool than with the other frame creation tools:

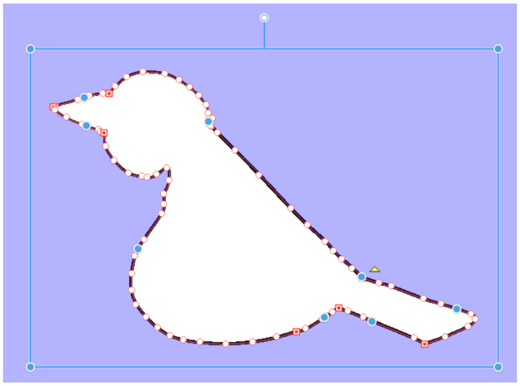


Figure 3.22 – A screenshot of a frame made using the Frame Border pen option

Frame border pen is for more complicated shapes, and is easy for just drawing freehand! It will give you more freedom with panel shapes!

One layer and many panels, or one layer for each panel?

You may be wondering: why use the **Frame Border** tools to create panels when we can use the various shape tools to simply draw a border and create our art inside of it?

Frame Border panels come with a feature that makes them a lot more convenient than just using the **Direct Draw** tools to make a square and drawing your comic art inside of it. As you may have noticed from the screenshots, the outsides of the comic borders are shaded in the color purple. This is because the frame borders are made with a layer mask automatically on the outsides of them. Because of this layer mask being generated, we can create artwork that goes outside of the panel but that is automatically cleaned up.

For instance, let's look at the images in the following screenshot:

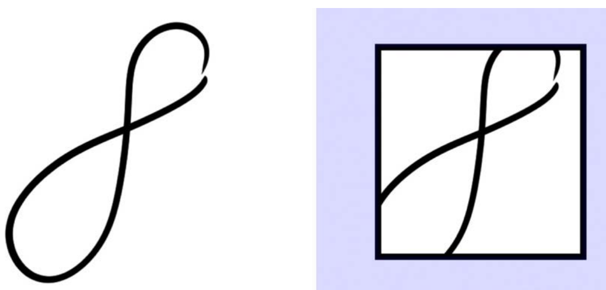


Figure 3.23 – Screenshot of a drawing and the same image with a panel

The line on the left was drawn quite big, and in the right image, only the parts of the line inside the frame border panel are visible. Because of this layer mask, we don't need to spend time tediously making sure that our art doesn't go outside of the panels.

However, we can create our panels either all on their own layer or with every panel on the same layer. In the following screenshot, one panel has been created on its own layer and two more panels have been created on the same layer:

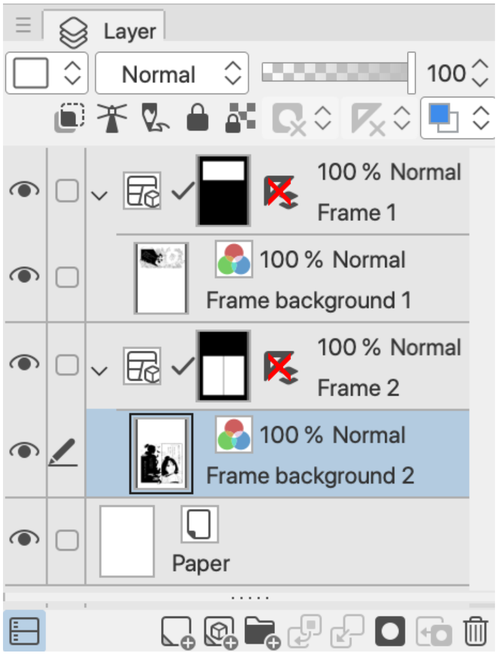


Figure 3.24 – A screenshot of a layer with Frame Border panels

You can see the outlines of each layer by looking at the black and white layer mask icons to the left of the layer names. The **Frame 1** layer contains one panel at the top, while the **Frame 2** layer contains a panel at the bottom left, and also the bottom right. These were created by toggling between the two options in the **How to add** drop-down menu in the Tool Properties for the **Rectangle frame** tool.

As shown in the following screenshot, the **Frame 1** layer allows us to see only what is inside of the attached layer mask. The other two panels are shaded out and the contents of those frames will not be visible, and not affected when you draw:



Figure 3.25 – A screenshot of a page with the Frame 1 layer selected

If we create all our panels on separate layers, then each will be independent of the others. However, with panels created on the same layer, artwork can be shown in multiple panels continuously. In the following screenshot, the drawing from the top panel is shaded behind the layer mask:



Figure 3.26 – A screenshot of a page with the Frame 2 layer selected

Ultimately, the decision of whether to put all your frames on their own layers or all on one layer is yours to make. Putting each on its own layer means more layers to manage and more clicking around to complete your comic page. But putting them all on one layer means managing more of your creation process to ensure that artwork is only in the frame it's supposed to be in. Personally, I work more comfortably using only one or two panel layers, just because there are fewer layers to toggle around and it can make work simple. But of course, the right choice for you will depend on your working style and preferences!

You now know why we need frame border panels, and how to create them in various ways. Don't panic, even if the panel shape you have created is not entirely the same as you desired, you can always edit it! Read on to find out how.

Dividing and editing panels

A big advantage to working in the digital realm is the ability to make edits on the fly. Yes, our frame border panels can be edited even after we've created them. Resizing, rotating, and even completely changing the position of our frames is possible, as is adding a new one or deleting one entirely. In this section, we will learn how to modify the frames we've created.

If you haven't created panels already, follow the instructions in the *Making Comic Panels* section of this chapter and put some panels on a page!

To resize a comic panel, you'll need to first select the **Object** tool from the **Operation** category of tools. Then click on the outside edge of the comic panel to select it. When selected, a red line will show along the outline of the panel, as well as some light-blue handles, and small yellow arrows. Around the outside edge of the panel, a rectangle with a light-blue handle at each corner and a handle at the center-top will also show.

To resize the panel manually, click on one of the light-blue handles and drag. Once the desired size is reached, let go of the mouse button.

The small yellow arrows can also be used to resize a panel quickly. Clicking on one of the yellow arrows will automatically take that edge of the panel out to either the same size as a nearby panel (if there are any nearby panels), or take that side of the panel to the edge of the page. In the following screenshot, the yellow arrow on the left-hand side of the panel was used to quickly make the panel bleed off the edge of the page:

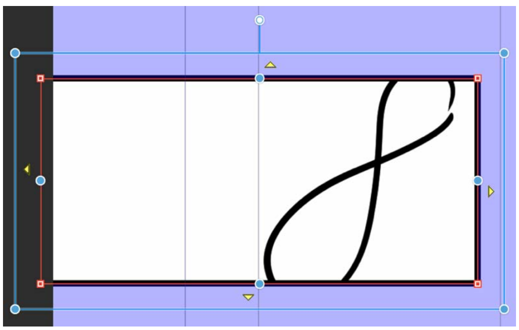


Figure 3.27 – A screenshot of panel resizing

Rotating a panel is just as simple as resizing one! To rotate a panel, simply move the mouse over the light-blue handle sticking up outside of the bounding box at the top of the panel. The cursor will change to a curved double-headed arrow once it is in the correct position for rotating. Click and drag to rotate the panel to the desired position.

In the following screenshot, the handle was used to rotate the panel clockwise:

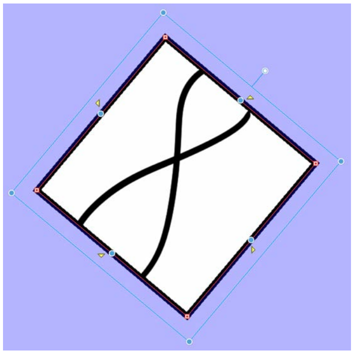


Figure 3.28 – A screenshot of the panel rotating

To move the selected panel, put the **Object** tool over the red outline around the edge of the panel. Click and drag to move the panel to the new location. Release the button once the new position is reached to stop moving the panel.

The following screenshot shows that the panel has been moved down and to the right from its starting position:

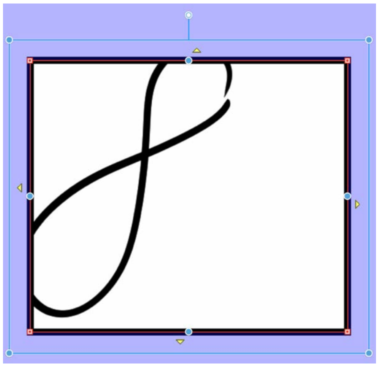


Figure 3.29 – A screenshot of the panel expanding

So now you know you can move/edit panels around even after you have already drawn artwork. Phew, what a relief!

Dividing existing frames

Remember how I said earlier that we would cover the **Divide frame folder** and **Divide frame border** tools later? Now is the time!

These two tools can take one frame and turn it into two. But, just as their names suggest, they each perform that division a little differently. Earlier, we discussed how we can either make our frames all on one layer or each on their own layer. These two dividing tools divide the existing frames into either separate layers or frames all on one layer. Let's look at each tool and how to use it.

Here is a screenshot showing the **Tool property** palette for the **Divide frame folder** tool:

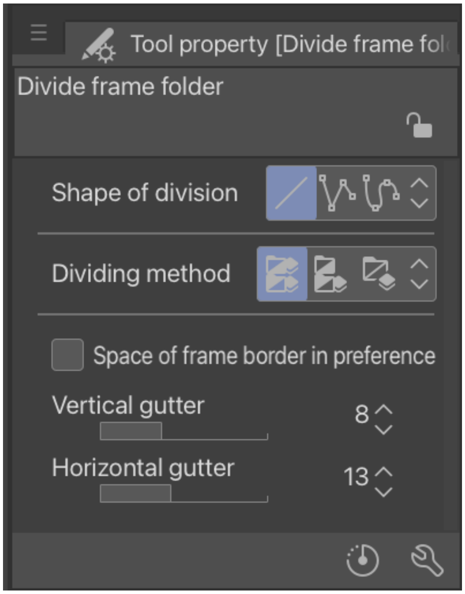


Figure 3.30 – A screenshot of the Tool property palette of the Dividing frame folder tool

In the following list, you will find a description of each of these settings:

- **Shape of division**: Controls how the panel is divided. The options are **Divide by straight line**, **Divide by polyline**, and **Divide by spline**. Using the straight-line option will produce a panel division that is one straight line. Polyline division allows us to create a panel division using a segmented line. The spline division option allows us to create a curved panel division.

- **Dividing method**: Controls how the panel division operation is carried out. The options are **Divide frame folder and duplicate inside layer**, **Divide frame folder and create empty layer**, and **Divide not folder but frame border**. The first two options will create a new panel folder after the division is completed, but the first option will duplicate the layer inside the existing panel, while the second will create an empty layer inside the folder. The third option turns the **Divide frame folder** tool into the **Divide frame border** tool by splitting the frame but keeping both new frames on the same layer.
- **Space of frame border in preference**: Uses the value set in the program preferences to set the gutter space between panels.
- **Horizontal gutter**: When the preceding option is not checked, this sets the height of the horizontal gap between panels.
- **Vertical gutter**: When the option to use program preferences isn't in use, this sets the width of the vertical gap between panels.

Using the **Divide frame folder** tool is easy. Simply select the tool and click on or near the edge of the panel to divide. While holding down the mouse button or stylus, drag to where you want to divide the panel. A set of lines will show a preview of the panel division so you can see exactly what your new panels will look like. Once the preview lines are in the correct spot, release the mouse button to complete the division.

In the following screenshot, our panel has been divided into two panels, each in its own folder:

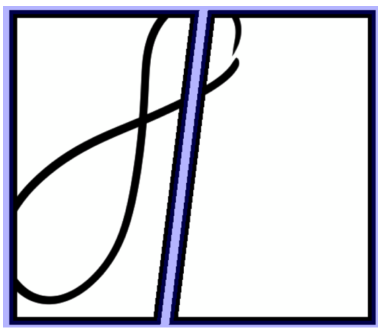


Figure 3.31 – A screenshot of a panel divided into two

The **Divide by straight line** option in **Shape of division** was used to split the preceding frames.

Here is a screenshot of the **Tool property** palette for the **Divide frame border** tool:

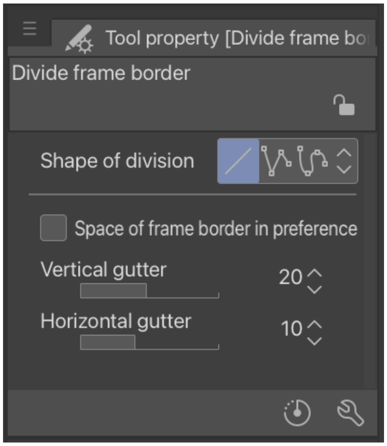


Figure 3.32 – A screenshot of Tool property for the Divide frame border tool

See the preceding list for a breakdown of each of these options.

This tool divides an existing frame but keeps each new frame on the same layer, making connected panels. In the following screenshot, the panel has been split using the **Divide by spline** setting, in order to make a curved division:

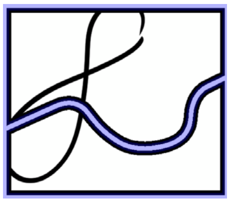


Figure 3.33 – A screenshot of curved division

Now we know how to create, edit, and divide panels. We can also use panel templates to help save time with page creation. Keep reading to find out how!

Using Framing template materials

The Material palette has tons of useful resources that can save lots of time when working on your creative projects. Included in the Material palette are a large number of framing templates that can be used to easily and quickly set up a comic page.

You will find out more about the Material palette in *Chapter 10*, *Vector Layers and the Material Palette*.

The comic panel templates can be found in the Material palette, under the **Manga material** folder, and in the **Framing template** sub-folder. This folder is shown in the following screenshot:

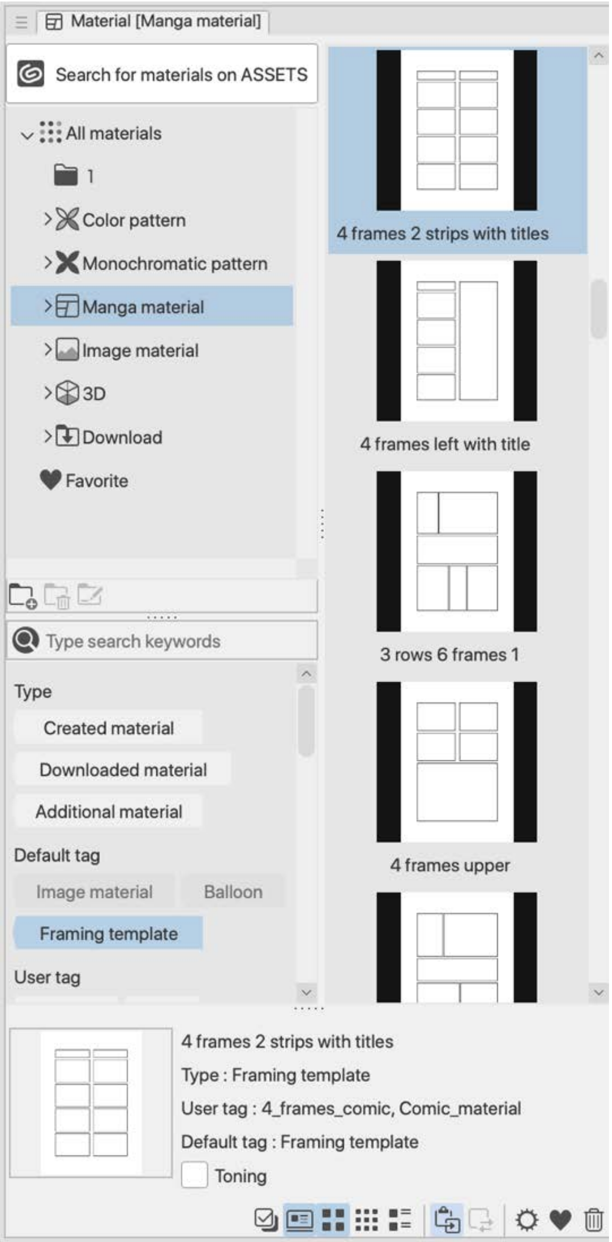


Figure 3.34 – A screenshot of the Material palette

The icons on the right-hand side of the Material palette show a preview of the layout of the comic panels. To add one of these to your page, locate the desired Framing template and click to select it. The selection will be highlighted in blue. To add the material to your page, click on the **Paste selected material to canvas** icon at the bottom of the Material palette, which looks like the following screenshot:

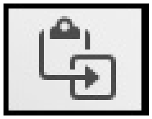


Figure 3.35 – A screenshot of the Paste selected material to canvas icon

The following screenshot shows the **4 frames 2 strips with titles Framing** template added to it:

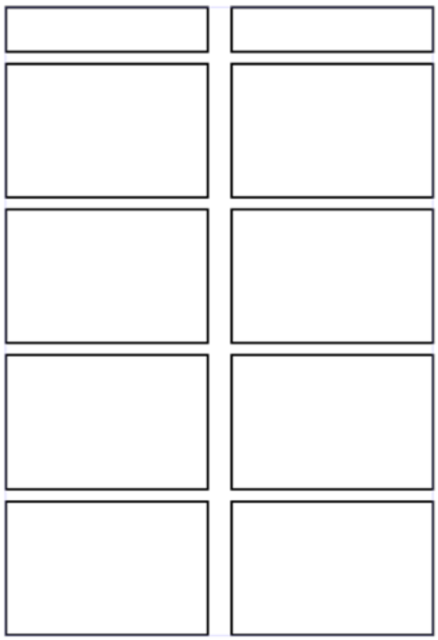


Figure 3.36 – A screenshot of a pasted template

And this screenshot shows that each panel in the template is in its own empty folder in the **Layer** palette:

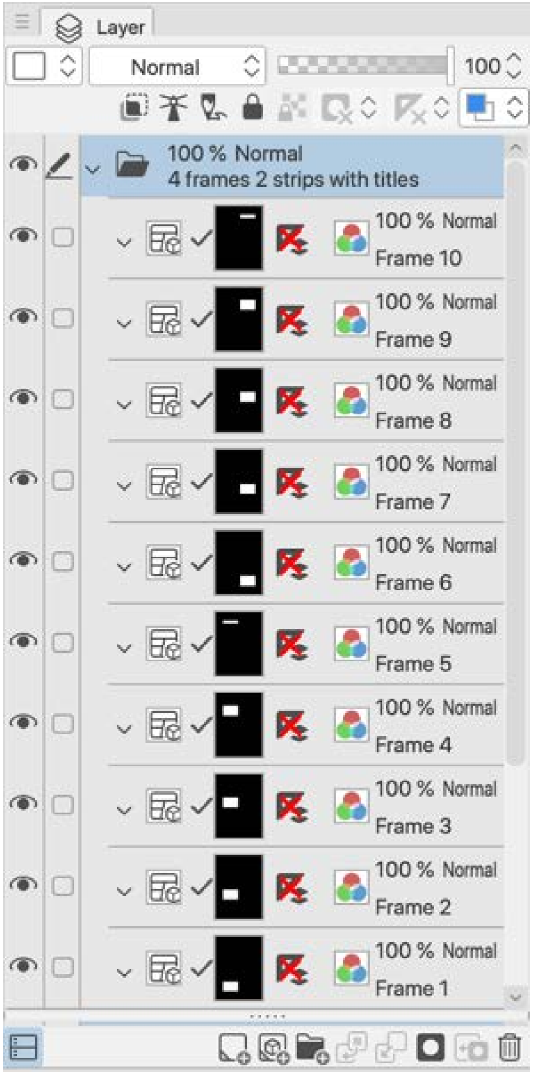


Figure 3.37 – A screenshot of the Layer palette after pasting a template

By using the framing templates, we can also concentrate more on the art of drawing our comics!

> **Tip**
>
> Want to save some time by using a Framing template but each of your comic pages has a different panel layout? Create a **Framing template** with one large panel around the inner border of the page and apply it to the story file. Then, use the **Divide Frame Folder** or **Divide Frame Border** tools to slice one large panel into smaller panels!

Summary

In this chapter, we covered all manner of ground regarding manga creations! First, we learned how to set up workspaces, then about creating new files and templates, and finally, all about frame border panels! Now you have a great manga workspace to draw your stories onto, shall we move on to exploring art tools?

In the next chapter, we are going to look closely at Clip Studio Paint brushes. I will introduce great brushes and how to navigate, copy, save, and restore them. Let's read on!

4
Introducing Clip Studio Paint Brushes

In the analog world, drawings are made on paper or canvas with pencils, ink, paint, brushes, and many other tools. In the digital world, too, we have a myriad of tools—many that imitate real-world art supplies and techniques. In Clip Studio Paint, the bulk of these mark-making tools fall under the heading of brushes, which includes sub-categories such as pencils, pens, markers, pastels, oil paints, and more. We're going to get familiar with the toolbox of brushes so that when we get to drawing, we will be familiar with the default tools and how we can change these tools to suit our individual style of working.

In this chapter, we will cover the following topics:

- Understanding the categories of Clip Studio Paint brushes and navigating them
- Introduction to the Clip Studio Paint brush engine
- Exploring the tool properties and settings
- Copying, saving, and restoring brushes

Let's jump right into learning about these versatile digital art tools!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and then you need to open a new blank canvas. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

Navigating the brushes

Out in the world of analog art, a brush is a very specific tool. In Clip Studio Paint, however, the word *brush* can refer to several different tools. Usually, we use the term *brush* to refer to a digital tool that is used with the stylus or mouse to draw lines, as opposed to other tools that fill colors, or select or perform the other operations that can be performed in digital art.

Most of the tools that we will refer to as brushes can be found in one section of the toolbar in the user interface. These tool icons are labeled as **Eraser**, **Pen**, **Pencil**, **Brush**, **Airbrush**, **Decoration**, and **Blend**. The icons for these tool categories are shown in the following screenshot:



Figure 4.1 – Screenshot of the toolbar

Clicking on one of these icons in the toolbar results in a change in the **Sub Tool** palette. For instance, when we click on the *Pencil* icon in the toolbar, we can see the categories of pencils in the **Sub Tool** palette, as shown in the following screenshot:

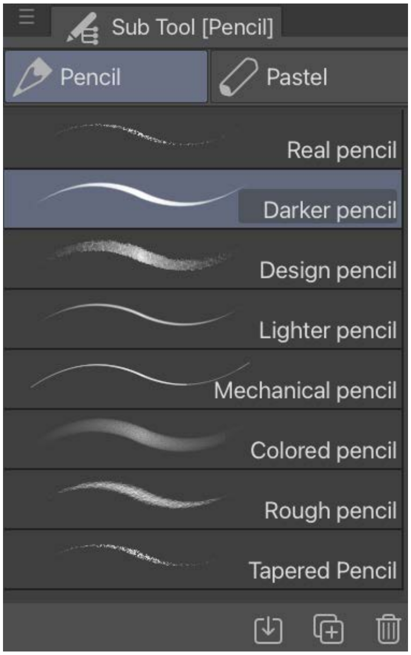


Figure 4.2 – Screenshot of the Sub Tool palette

The buttons at the top of the **Sub Tool** palette show the different categories of tools available under the **Pencil** heading. These include **Pencil** and **Pastel** as defaults.

The **Pencil** and **Pastel** categories have additional tools beneath them, including **Darker pencil**, **Lighter pencil**, and **Mechanical pencil** in the **Pencil** category. These tools are a collection of settings that change how the stylus interacts with the canvas and changes the look of the digital marks that are made. For instance, the following screenshot shows circles that have been drawn with the **Darker pencil** tool on the left and the **Colored pencil** tool on the right:



Figure 4.3 – Screenshot of the pencil drawings

See the difference in the look of the lines? The **Darker pencil** tool produces a thicker, bolder line with more variation, similar to what you would get using a traditional graphite pencil. The **Colored pencil** tool is a thinner, softer line.

Take a moment now to look under each brush tool category and **Sub Tool** category and check out the different tools. Open a blank canvas and use the tools that look the most interesting to you to make marks on the canvas and test them out. One of the best things about doing digital art is how forgiving it is. If you don't like a mark that you have made, it can always be erased or undone, so take this opportunity to play around and familiarize yourself with the tools.

When you've done that, let's move on and become familiar with the brush engine, a powerful tool that allows you to customize your tools to suit your style!

The brush engine

Clip Studio Paint makes it easy to create your own tools with their powerful—but simple to use—brush engine. There are lots of options in the brush engine, such as brush size, shape, and how it's corrected. But once you learn what each one does, it's easy to make the best tools for your own needs. Let's get started right away by looking at the brush options and learning what each one does.

Accessing the brush options

To access the options for creating and changing brushes, click on one of the brush tools. In this example, we'll be looking at **G-pen**, which is a sub-tool under the **Pen** tool. Once you have chosen a brush tool as your currently active tool, locate the **Tool Property** palette. In the lower right-hand corner is an icon that looks like a wrench. Click on the wrench icon, which is displayed in the following screenshot, to open the **Sub Tool Detail** palette:

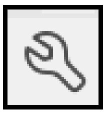


Figure 4.4 – Screenshot of the Sub Tool Detail icon

The **Sub Tool Detail** palette is shown in the following screenshot:

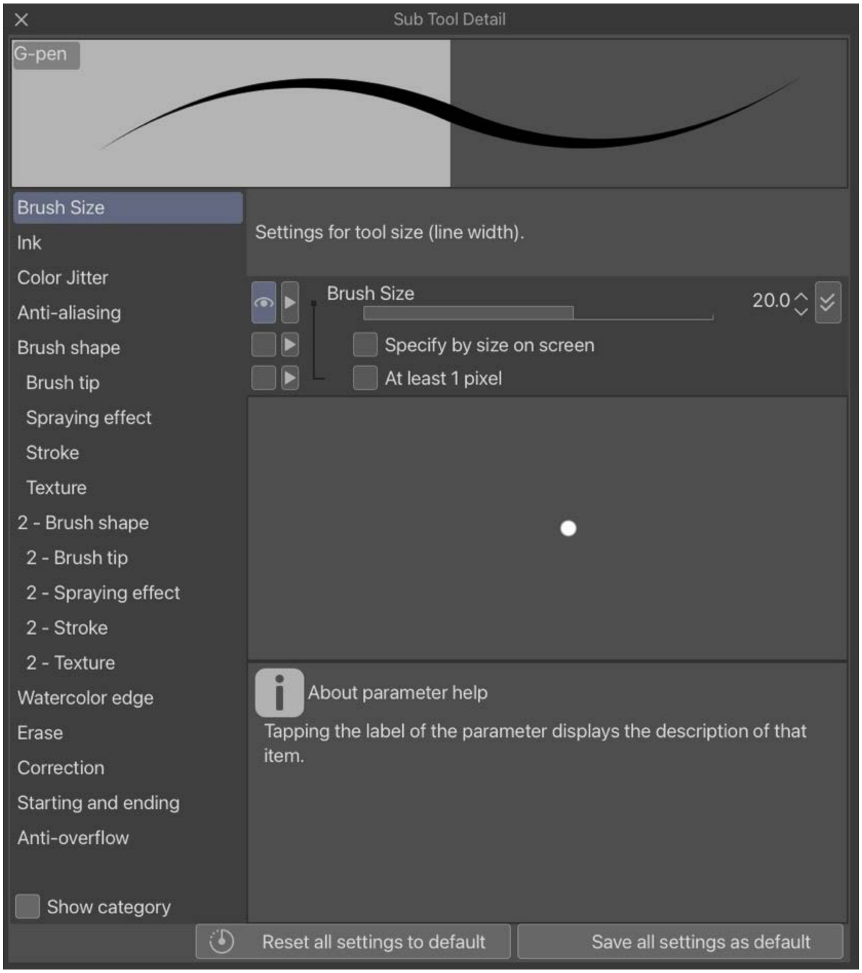


Figure 4.5 – Screenshot of the Sub Tool Detail palette

The categories of options are listed on the left-hand side column, and the actual options to edit are shown on the right-hand side.

We're going to go over making a custom brush for special effects in *Chapter 9*, *Inking Special Effects*, so we're going to cover more of these brush options in that chapter. In this chapter, we're just going to get a feel for customizing the existing tools, so we'll be covering the options that are most useful for tweaking the feel and look of existing brushes. Now, let's examine the options under the **Brush Size**, **Ink**, **Anti-aliasing**, **Correction**, and **Starting and ending** categories of options.

Brush size

The **Brush Size** category has options related to the size of the brush or the line width. This controls how thick or thin the mark being made is. The size of the brush is set using the slider by clicking on the current number to the right of the slider and using the number pad to enter the size manually, or by adjusting the brush size by using the up and down arrows to the right of the number display. The brush size can also be changed according to other factors, such as the pressure applied to the tablet stylus. To access these settings, click on the rectangular button all the way to the right of the **Brush Size** screen. The following sub-menu will appear:

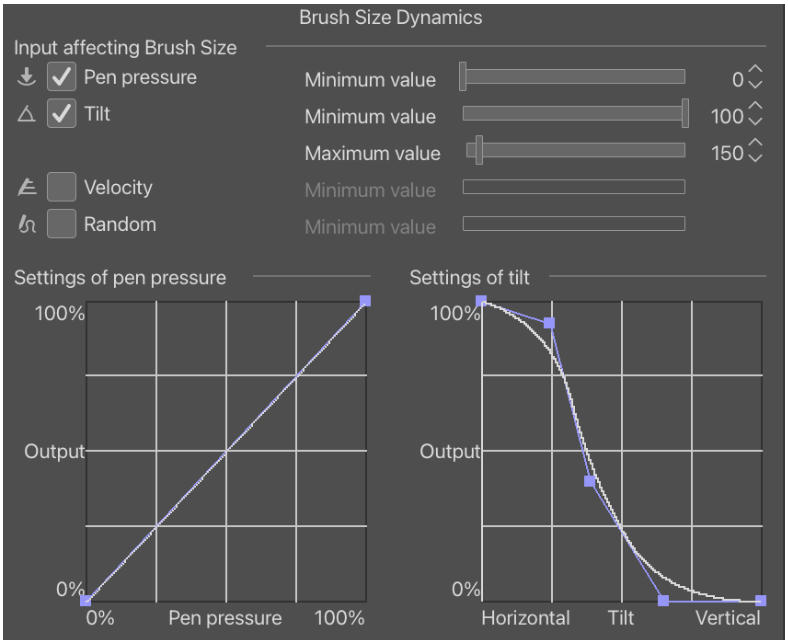


Figure 4.6 – Screenshot of the Brush Size sub-menu

> **Tip**
>
> There are more options in the brush engine that can also be adjusted according to source settings. Look for the rectangular button to the right of those options to access the source settings menu for options such as **Opacity**, **Mixing rate**, **Brush tip thickness**, **Density**, **Direction**, **Particle Size**, **Particle Density**, **Direction of Particle**, **Gap**, and **Texture Density**!

In the source settings, we can set the option to be influenced by various factors. The most common is **Pen Pressure**. Checking the box to the left of each setting will activate the **Pen Pressure** setting. In the preceding screenshot, this setting is already active. **Minimum value** in the case of this option controls how thin the line we are making can get. Having this value set to *0* means that we can go from the thickest possible line with this tool to something so thin that it's no longer making a line just by varying how lightly we apply the stylus to the tablet's surface. Making the minimum value larger will produce less change between the thickest and thinnest points of the line.

The brush size can also be changed according to the **Tilt** of the tablet stylus, or the **Velocity** of the user's stylus stroke. It can also be set to **Random**, which will generate a random value as the line is drawn.

Beneath the different factors and the **Minimum Value** sliders, there are two curve graphs. One is for **Pen Pressure** and the other is for **Tilt**. This curve can be altered using the handles along the line to produce different effects.

Now that we've discussed the source settings, let's head back to the main **Sub Tool Detail** menu and continue exploring the other options that we have at our disposal.

Directly under the **Brush Size** slider, there are two checkboxes. The first is **Specify by size on screen**. When this option is activated, the size of the brush will not be changed according to the amount of zoom. Therefore, a tool that is *4.00* in size when the document is at 100% zoom will be the same size when the document is scaled up or down, instead of becoming larger or smaller as the zoom changes. The other checkbox is **At least 1 pixel**. This option ensures that the mark being made is at least one pixel, even if the pen pressure becomes so light that the line should be interrupted according to the **Pen Pressure** settings.

Ink

The next category of options is the **Ink** category, which is related to thickness and the blending of the ink color. The options are as shown in the following screenshot:

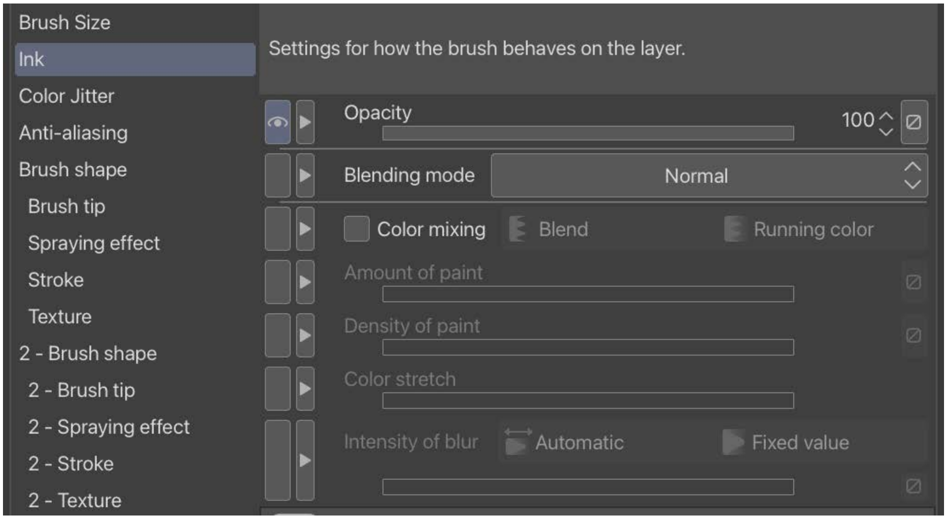


Figure 4.7 – Screenshot of the Brush Size sub-menu

Let's look at each option and what it controls:

- **Opacity** is how opaque (or see-through) the line is.
- **Blending mode** changes how the line color influences other colors already drawn on the same layer. We will discuss blending modes in further detail in *Chapter 16, Using Clip Studio Paint to Color Your Manga*.
- Activating the **Color mixing** checkbox activates the options below it. **Color mixing** allows you to make traditional paint and watercolor effects by mixing the current color with other colors already used on the same layer.

The following list describes the options beneath the **Color mixing** checkbox:

- **Amount of paint** controls the percentage of the RGB values of the ground color (previous color) and the current color that is mixed.
- **Density of paint** controls the percentage of the transparency of the ground color and the current color that is mixed.

- **Color stretch** controls how much of the paint we keep at the stroke starting point. The higher the number, the more intense the color will be throughout the entire stroke of the brush, instead of being concentrated at the starting point.
- **Intensity of blur** is only available if the **Color mixing** option is set to **Running color** instead of **Blend**. This option allows us to set the width of the blur for a color already drawn on the image. If this option is set to **Automatic**, then the blur is dependent on the size of the brush.

Now you know how to adjust the size and color of the brush. Next, we will be looking at how we can blend colors on the brush stroke.

Color Jitter

Under the **Ink** category, there is a **Color Jitter** category, which can make the brush color vary in terms of its stroke. If the brush tip color is fixed, the **Color Jitter** setting will not affect the brush color. The options are in the following screenshot:

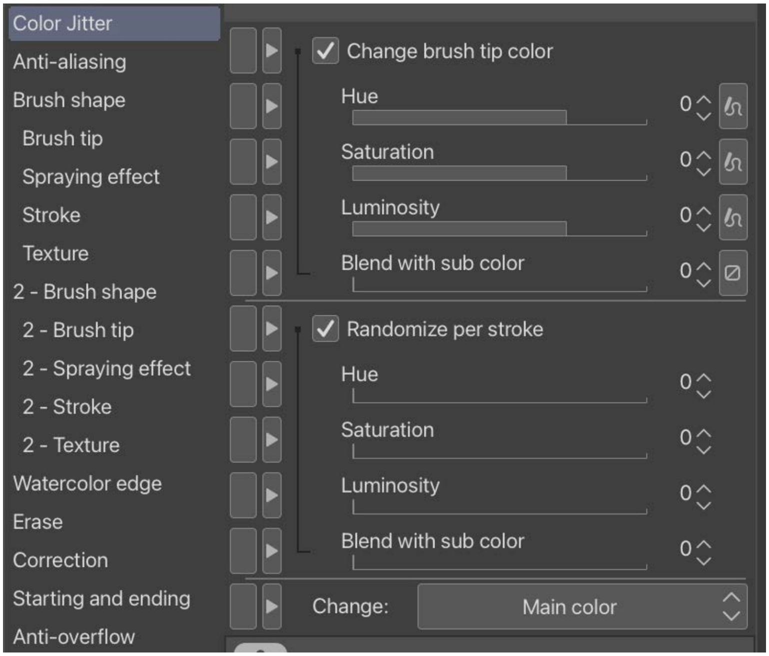


Figure 4.8 – Screenshot of the Color Jitter category

Let's have a look at each setting to see how it affects brush color:

- **Change brush tip color** gives you control over the Brush tip Color Dynamics setting with four options when it's turned on.

- **Randomize per stroke** gives you control in terms of randomizing the color of each stroke as you draw when it's turned on.

Let's see the four options for each checkbox:

- The **Hue** slider controls the degree of variation of the color to add to your brush stroke.
- The **Saturation** slider controls the vividness of the color to add to your brush stroke. Higher values result in more vivid colors.
- The **Luminosity** slider controls the value of the color mixed in your brush stroke.
- The **Blend with sub color** slider allows us to draw with a combination of the main drawing color and the sub drawing color. The larger the value, the stronger the sub drawing color becomes in the drawing.

At the far right of each slider, there are pen image icons. If you click one of them, a **Color Dynamics** sub-menu will appear as the following screenshot:

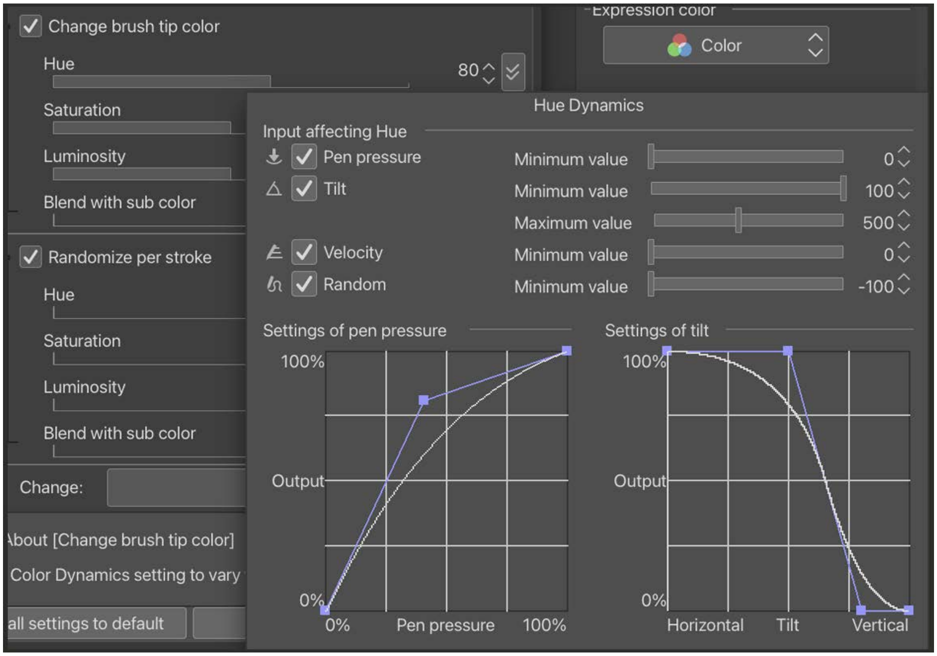


Figure 4.9 – Screenshot of Hue Dynamics palette

Each option controls how the input source affects the brush stroke color. It is very similar to the **Brush size Dynamics** sub-menu we looked at in the Brush size section.

My favorite setting is to turn the **Pen pressure** input on, under the **Blend with sub color** slider, with a value of **50** for **Change brush tip color**. So, I can enjoy having a sub color appear naturally when I apply pressure to the brush, gradually increasing it while drawing. This gives you great control while merging two different colors. The following example is the brush using my favorite settings, with red as the main color and white as the sub color:



Figure 4.10 – Brush example

This category provides you with endless experiments in terms of brush stroke colors! Let's now move on to more interesting settings that maximize the benefit of using digital art tools.

Anti-aliasing

The next category that we will look at in this chapter is the **Anti-aliasing** category, which controls the smoothness of brush strokes. The options appear as follows:

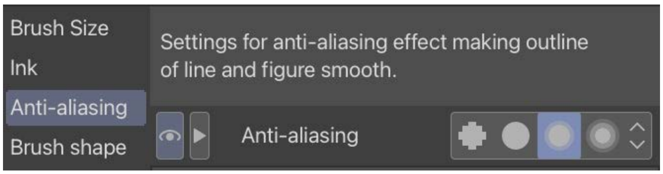


Figure 4.11 – Screenshot of the Anti-aliasing category

Anti-aliasing is a fancy way to describe how jagged or smooth a digital line looks. Using the icons in the **Anti-aliasing** category, the smoothing of a line can be set to **None**, **Weak**, **Middle**, or **Strong**. The following are two examples of lines made with the **G-pen**. The top one has anti-aliasing set to **None**, while the bottom one is set to **Strong**:



Figure 4.12 – Screenshot of the Anti-aliasing category

Notice how the top line has lots of sharp edges that make it look like it's pixelated. Anti-aliasing adds tones of gray to the edge of a line to smooth it out, avoiding this jagged look. The bottom line, with the option set to **Strong**, looks soft and almost blurry because of the amount of gray added around the edges.

Watercolor edge

Now, let's jump down the list of **Sub Tool Detail** categories to the **Watercolor edge** settings. **Watercolor edge** creates an edge on brush strokes when it's turned on. Combine this with textures for a watercolor effect. It's not visible with dense color brushes. The following screenshot is a watercolor edge brush stroke along with the **Watercolor edge** settings:

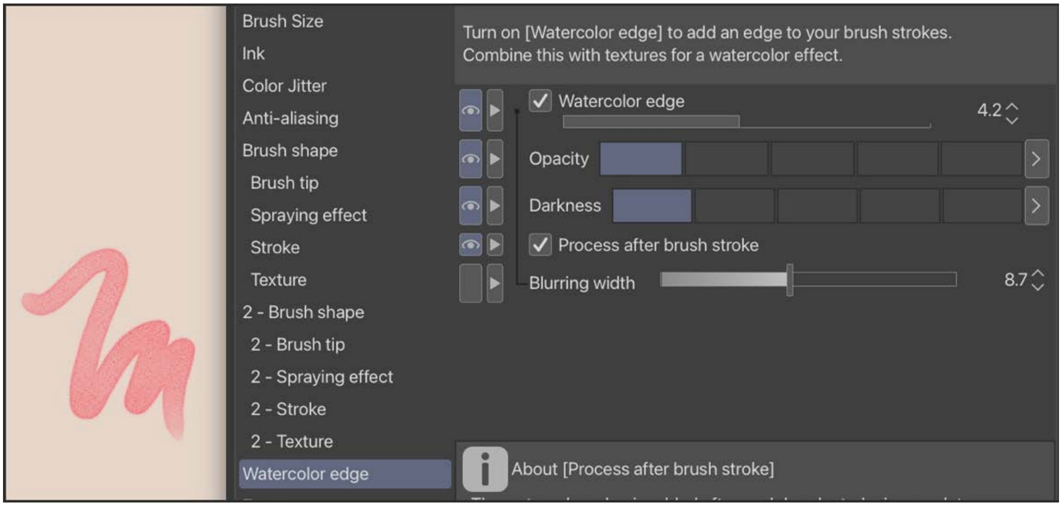


Figure 4.13 – Screenshot of the Watercolor edge category with an example stroke

Let's have a look at each of the available options:

- **Watercolor edge** controls the strength of the edge appearance.
- **Opacity** controls the color density of the edge.
- **Darkness** controls the darkness of the edge color.
- **Process after brush stroke** adds the watercolor edge after a brush stroke is completed when it's turned on.
- **Blurring width** controls the amount of blur effect at the edge.

Correction

Now, let's jump down the list of **Sub Tool Detail** categories to the **Correction** settings. **Correction** settings can assist us in making clean, sharp lines in our drawings, even if we have shaky hands or aren't used to doing digital art and inking yet. The trade-off for relying too heavily on some of these options, however, is that high settings on some of these options can cause computer lag depending on the specs of your system.

The following is a screenshot of the **Correction** settings:

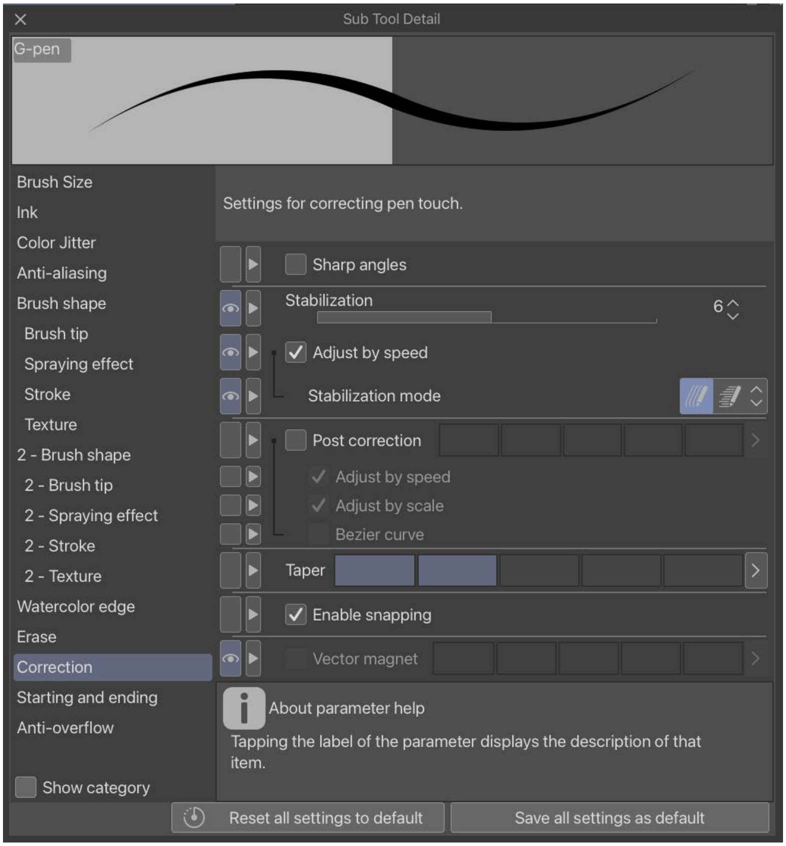


Figure 4.14 – Screenshot of the Correction category

Here are each of the **Correction** options explained:

- **Sharp angles** automatically makes corners in drawn lines into sharp points, even if they are slightly curved.

- **Stabilization** is used to smooth out your lines with the software. The larger the value of the **Stabilization** setting, the smoother the line will be (even if the line you actually draw is shaky). The **Adjust by speed** checkbox will allow the stabilization level to adjust depending on the moving speed of the brush. You can choose whether you want more stabilization when you move your brush more slowly or more quickly.
- **Post correction** will stabilize the line and smooth it out once the line has been drawn. There is a slight lag between the line being drawn and the smoothing. **Adjust by speed** smooths the line more, depending on the speed at which the line is drawn. **Adjust by scale** controls the amount of smoothing of the line based on the zoom of the canvas. **Bezier curve** converts the line to a quadratic Bezier curve once the correction is completed.
- **Taper** automatically tapers the end of lines, depending on the value set. The larger the value, the more tapered the end of the line will get after the brush mark is made.
- **Enable snapping** controls whether or not this tool will snap to an active ruler. We'll be learning all about rulers in *Chapter 13*, *All About Rulers*.
- **Vector magnet** is used on vector layers. It allows the new line to merge automatically with existing vector lines. More information about vectors will be presented in *Chapter 10*, *Vector Layers and the Material Palette*.

Using **Stabilization** and **Post Correction** can make a huge difference in your inking. It's great if you're just getting into working digitally or your hands aren't very steady. For example, in the following screenshot, the line on the left is before **Post Correction**, and the line on the right is the same line after the correction has taken place:



Figure 4.15 – Screenshot of line drawings

Notice how much smoother the line on the right is when compared to the one on the left, especially around the curves. Sometimes, this computer correction can make lines look less organic, though, so depending on your personal art style, you may want to use it sparingly. Or, if your style lends well to super smooth curves, then go crazy!

> **Tip**
> In the section that follows, *Playing with brush settings*, we're going to learn how to copy a tool and make changes to the copy. I like to ink my figures with a very organic-looking brush tool, but I also have a copy of that tool with the stabilization set high to ink robotic objects and inorganic backgrounds. Saving copies of your favorite tools can help save time, so give it a try!

Starting and ending

Let's now take a look at the **Starting and ending** category. These options alter how the beginning and end of a drawn line appear. If you are struggling to get a perfectly tapered line, these settings will help you to achieve the look you desire!

The following is a screenshot of the **Starting and ending** settings screen:

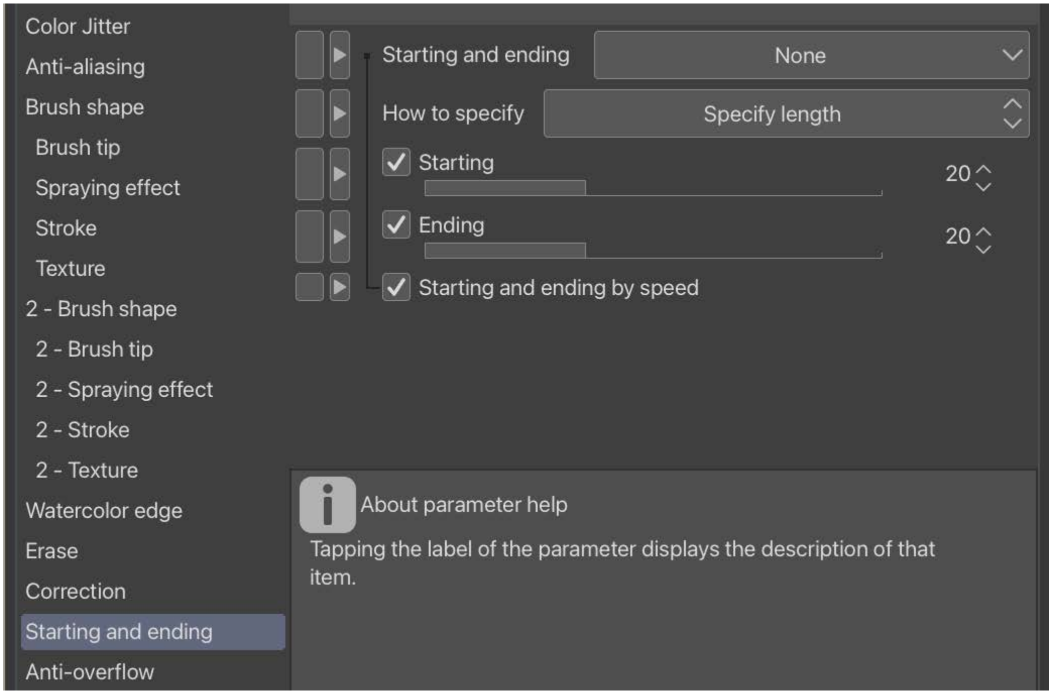


Figure 4.16 – Screenshot of the Starting and ending category

The very first option beneath this category is a drop-down menu with options for changing the beginning and end of lines. The following is a screenshot of this drop-down menu:

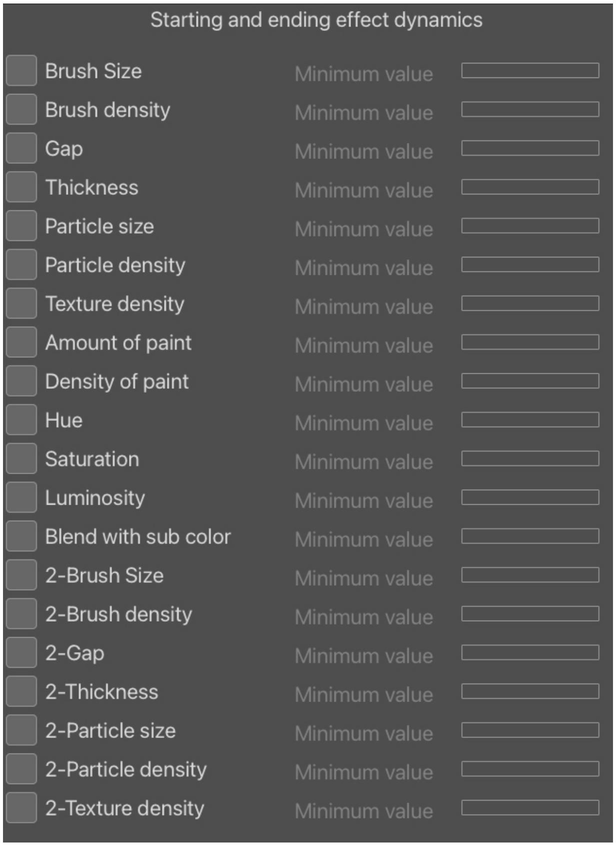


Figure 4.17 – Screenshot of the Starting and ending effect dynamics

Each of the items listed is a factor that the start and end of the line can be modified by. Checking the box next to the desired parameter activates it, and the slider to the right is then used to set the minimum value of that setting.

The following options are also present in the **Starting and ending** settings:

- **How to specify** allows the **Starting and ending** settings to be set by **Length**, **Percentage**, or **Fade**. **Length** and **Percentage** will produce lines that go from the set minimum value to the full value and then back to the minimum value, depending on the length of the drawn line. Selecting **Fade** will only change the ending of the line and not the beginning.

- The **Starting** checkbox and slider allow us to configure the length of the effect at the start of the line. The **Ending** checkbox and slider do the same thing, except to the end of the line!
- **Starting and ending by speed** will set the values of the starting and ending effect according to the speed at which the line is drawn.

The next option is the final one.

Anti-overflow

The last brush category is **Anti-overflow**. It comes in handy when we are adding color to images. We need to set a line art layer as a "reference layer" first, to stop the brush strokes from going beyond the lines. You can do this by selecting the line art layer and clicking the **Set selected layer as a reference layer** icon, which looks like a lighthouse image on the layer palette.

The **Anti-overflow** settings appear as in the following screenshot:

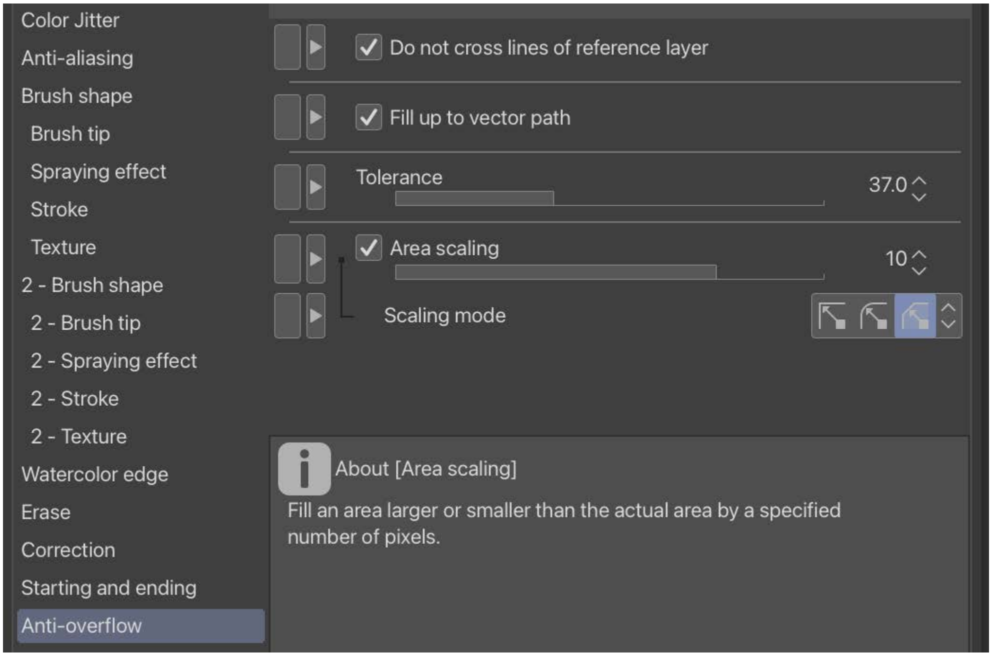


Figure 4.18 – Screenshot of the Anti-overflow settings

- **Do not cross lines of reference layer** restricts brush marks only on the side of the line where the center of the brush is when it's turned on.

- **Fill up to vector path** refers to a vector as 1 pixel per line when it's turned on and fills up the vector layer.
- **Tolerance** controls how many colors are included for selection. The bigger the value, the more colors that are included.
- **Area scaling** fills an area larger or smaller than the actual area by a specified number of pixels by means of three modes: **Rectangle**, **Round**, and **To darkest pixel**.

> **Tip**
> Not sure what a particular brush setting does? Hover over it with the mouse or stylus, and the bottom of the **Sub Tool Detail** screen will show a description of the option.

There are many, many possibilities in terms of fiddling around with brush settings! But mastering these options really helps when trying out new expressions and customizing the brush to your own needs, so read on to try out different settings!

Playing with brush settings

Now that we have an idea of what these brush settings do, let's play around with some brushes and the different settings to see what they do when they're in action. One of the best things about digital art is that almost nothing is permanent. If you make a mark with a pen, you can almost always undo it (or erase it). With Clip Studio Paint, if you make a change to a tool that you don't like, you can always revert the tool to its initial settings. That said, let's learn how to make a copy of an existing brush tool and then make changes to the brush tool and make marks with the copy to see what some of the brush options do when utilized.

Follow these steps to create a copy of a brush tool and change the settings:

1. Select the tool to be copied. For these instructions, we are going to use the **G-pen sub tool** tool.

2. In the **Sub tool** palette, which appears as in the following screenshot, click on the icon that is the second from the right at the bottom. This is the **Duplicate sub tool** icon:

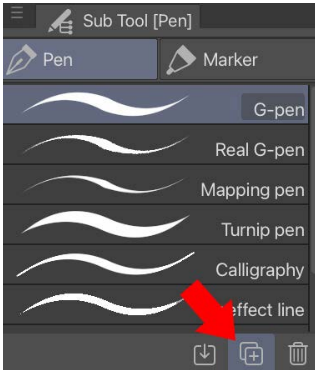


Figure 4.19 – Screenshot of the Sub Tool palette

3. In the pop-up **Duplicate sub tool** window that appears as the following screenshot, enter a name for the new sub tool. I've left the name as `G-pen 2` for this example:

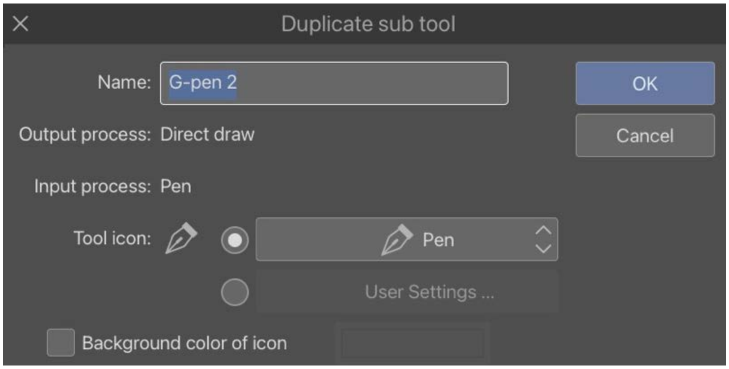


Figure 4.20 – Screenshot of the Duplicate sub tool window

4. Make sure that a canvas is open in the canvas window so that the new tool can be tested as changes are made.
5. Open the **Sub Tool Detail** window. Make sure that you can see and draw on the canvas behind the **Sub Tool Detail** window. We are going to use this blank canvas to test our changes.
6. Continue changing the settings and testing the new brush on the canvas to see the effects. Now is the perfect time to play around and discover what fits your personal preferences!

7. Once you're finished with changing the settings and seeing what they do in practice, you can either click on the **X** in the upper right-hand corner of the **Sub Tool Detail** window to close it and save the tool as it is, or you can reset the tool to its initial settings.
8. To reset the tool to its initial settings, press the **Reset all settings to default** button in the lower-left corner of the **Sub Tool Detail** window.
9. To save the new settings to the default settings (overwrite the previous default setting of the tool), press the button marked **Register all settings to initial settings** in the lower right-hand corner of the **Sub Tool Detail** window.

Now that we've copied a brush tool, made changes, and experimented with the settings, let's learn how to save a backup copy of our new brush tool and how to load a brush into the **Sub Tool** palette. Read on for more details.

Exporting and loading brushes

Whether you simply want to have a backup copy of all your custom tools in case a catastrophe should happen, or you want to share your brushes with the world by giving them away or selling them, knowing how to export your tools is a great thing. It's an extremely simple process that can save your hard work for the future, or provide an income stream if you're particularly good at making specialty brushes! But before we get into making specialty brushes in *Chapter 9*, *Inking Special Effects*, let's learn how to export and load brushes to make backup copies of our tools. You can export and import any type of sub tool in Clip Studio Paint, not just brushes!

Exporting a tool

Now let's look at how to export your tool. By following these easy steps, you will save a backup copy of the tool you created originally on your device. You don't have to worry if you modify your tool; the original is always there, in a folder on your device!

1. Select a sub tool to export. For this example, we will be using the **G-pen 2** tool that we created in the previous section.

2. In the upper left-hand corner of the **Sub Tool** palette is an icon of three horizontal lines. This is the **Sub Tool** drop-down menu. Clicking on it will display the menu, as shown in the following screenshot:

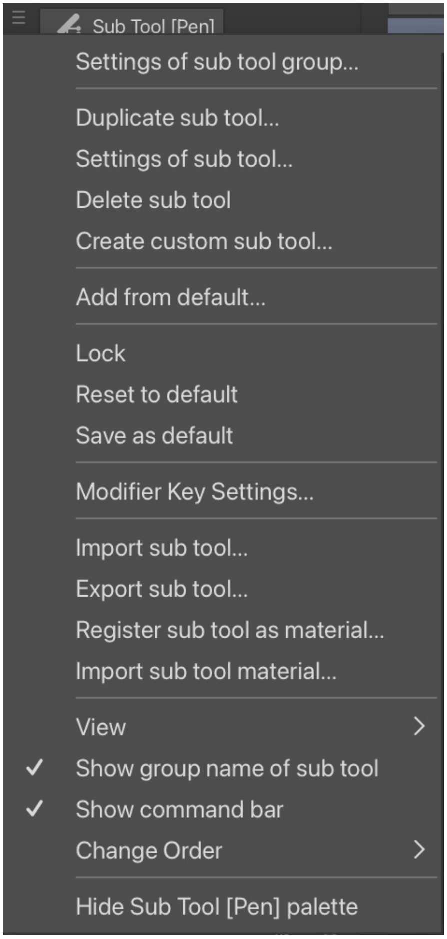


Figure 4.21 – Screenshot of the Sub Tool group menu

3. Click on the **Export sub tool...** option in the menu.

4. In the next screen, navigate to a folder where you wish to save the sub tool. Then, enter the name of the tool. In the following screenshot, we are leaving the name as `G-pen 2`:

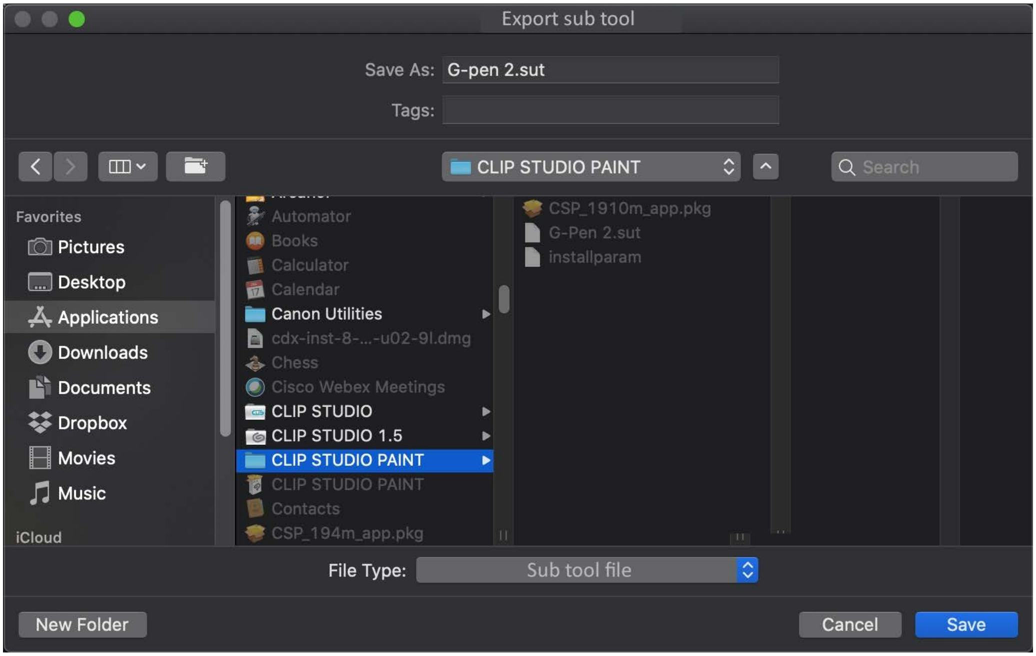


Figure 4.22 – Screenshot of the Sub tool saving window

5. Click **Save** to complete the export.

Now, let's learn how to load a tool into Clip Studio Paint.

Importing a tool

Now that we've exported our custom tool, let's learn how to import a tool. There are actually two ways to do this, so we'll cover both of them here!

The following are the steps for using the **Import sub tool…** option method of importing a tool:

1. Click on the **Pen** category in the toolbar, and then the **Pen** category in the **Sub Tool** palette, where the tool is to be exported.

2. Click on the **Sub Tool** drop-down icon, which looks like three horizontal lines, in the upper left-hand corner of the **Sub Tool** palette. Then, click on the **Import sub tool...** option.
3. Navigate to the folder where the sub tool file is located. Click on the file of the sub tool and then click on the **Open** button to complete the import.

The following is the click and drag method for importing a tool, which can also be used to import multiple tools simultaneously:

1. Either in your operating system in Windows or **Finder** on Mac, open the folder containing the tools to be imported.
2. In Clip Studio Paint, choose the **Sub Tool** palette category that the tool or tools will be stored in.
3. Click and drag the window with the folder where the tool files are located so that Clip Studio Paint's sub tool palette can be seen at the same time as the folder. This is shown in the following screenshot:

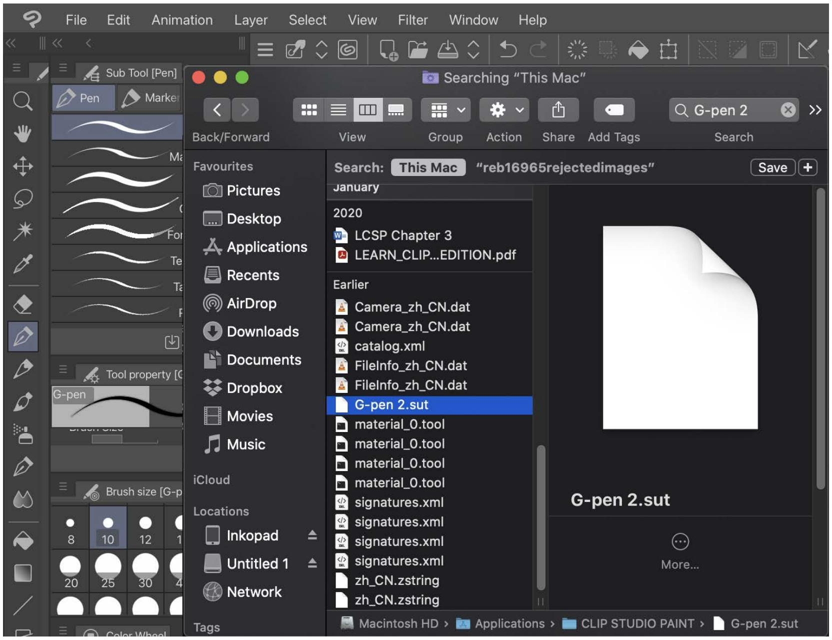


Figure 4.23 – Screenshot of the Sub tool category and the finder window

4. Select the tool or tools to be imported. Click and drag the tool or tool files over the **Sub tool** palette. The mouse cursor will turn into a + symbol. Release the mouse button to complete the import.

5. The import of the tool or tools will then be completed. In the following screenshot, we can see that **G-pen 2** has been added to the **Pen** sub tool group:

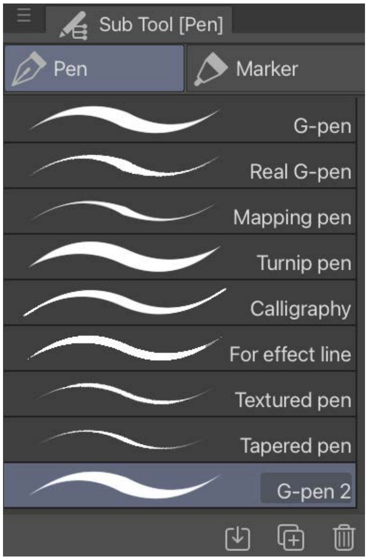


Figure 4.24 – Screenshot of the Sub tool category

Done! You have exported and imported sub tools. Isn't it great to know how to customize and move tool files? Now you're able to create tools on your own and organize them! It is like having real brushes and tool cabinets for storing them at a traditional artist's studio!

> **Important note**
>
> From version 1.10.6 onward, Clip Studio Paint can import Photoshop brush files (`.abr`). You can import them by using the same method as in this *Importing a tool* section! The brush results may differ from using them in Photoshop, but it's great to know that we can share brushes!

Summary

In this chapter, we have learned how to navigate the brush categories and sub tools. We have also learned how to customize our brushes using some of the options in Clip Studio Paint's brush engine. Then, we learned how to export our tools to make backups or share them with others, and two ways of importing new tools into our software.

Now that we've learned about brushes, in the next chapter, we will learn about one of the most versatile tools in digital art: layers. Read on to learn more!

5
Penciling: Layer and Layer Property Palettes

One of the best features of working in a digital art program is the ability to work in layers.

Layers are like stacks of transparencies used for projection: every transparency carries a bit of text or an element of the image, and when all the transparencies are stacked on top of each other, they form the complete image. Most digital art software allows the creation of layers, and Clip Studio Paint is no exception. In this chapter, it's all about the layers!

The topics discussed in this chapter will include the following:

- The Layer palette
- Properties of layers
- Different types of layers
- Layer groups and layer colors
- Layer Effects

Let's jump right in!

Technical requirements

To get started, you need Clip Studio Paint installed on your device and a new blank canvas. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

What is a layer?

A layer, in a piece of digital art, is a magical thing that can make our workflow smoother and easier, and it can also save a lot of headaches in the future when we go from pencils to inks to colors. Okay, so maybe it's not *actually* magic. But it's pretty darn close!

But what are layers and how do they work? Let's look at the following example image. The drawing in this screenshot is made from five layers:



Figure 5.1 – A sample drawing image

What exactly are those layers? In the following screenshot, we can see exactly what they are:

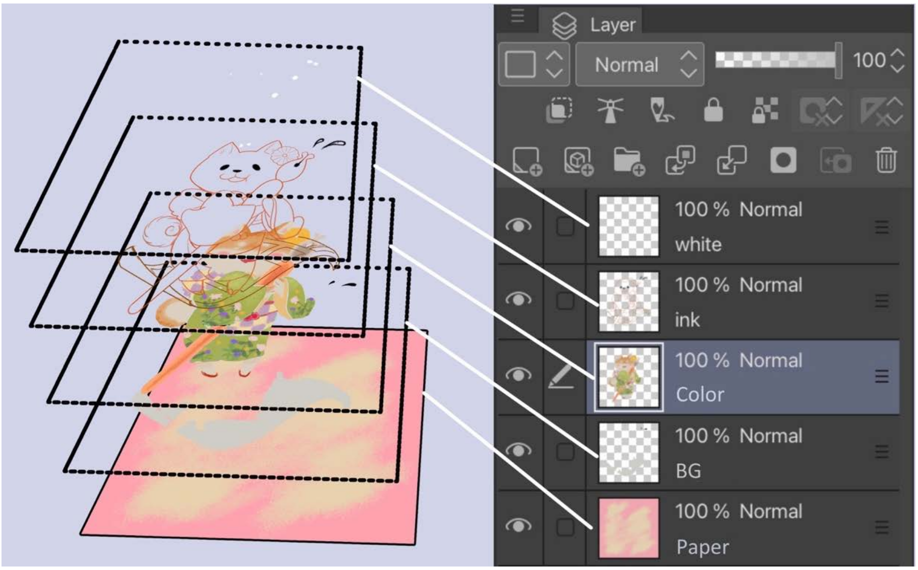


Figure 5.2 – Layer diagram

The pink background is a paper layer. On top of that, there is a layer with some gray, which the character is standing on. Then, there is a layer with most of the colors of the drawing. Above that is the actual line art (ink) for the character. Finally, on top is a layer with white dots for the shining effect.

As I mentioned at the beginning of this chapter, you can think of layers like a stack of transparencies. For you younger readers who may not know what a transparency is, it's a thin piece of clear plastic the size of a sheet of paper that was previously used to display information in school via an overhead projector. Every transparency has its own bit of text or part of the image, and when they are stacked on top of each other, they form the complete image.

It's entirely possible to create digital art without using layers, but layers can make your digital art life easier. Here are some of the benefits of using layers:

- Ability to change and edit inks even after coloring has begun
- Ability to add special effects to certain parts of an image
- Ability to easily color correct using adjustment layers, blending modes, and layer masks
- Ability to quickly revert your image back to inks only if a mistake is made in coloring

- Ability to change the color of line art easily without affecting the other parts of an image
- Ability to separate out individual characters or elements for reuse in other images
- Ability to organize image elements

There are many more benefits to using layers. Of course, there are also some downsides. Depending on how many layers you choose to use, the number of layers may begin to slow down computers with less RAM and disk space. Keep this in mind, especially when working on larger images with a high DPI.

Now that we know what layers are and why we'd want to use them, let's explore the **Layer** palette and talk about different types of layers.

Introducing the Layer Palette

Just like most options in Clip Studio Paint, layers have a palette that acts as a *command center* for managing and creating layers. When we look at the **Layer** palette in the following screenshot, we can see that there are many icons and options that apply to different layers:

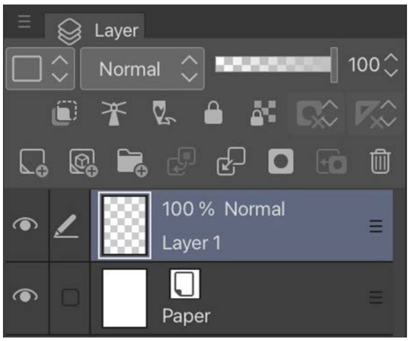


Figure 5.3 – A screenshot of the Layer palette

If you cannot locate the **Layer** palette in your Clip Studio Paint interface, go to **Window** in the **File** menu and click on **Layer** to display it.

There are two drop-down menus and a slider on the top row. The first drop-down menu on the left is used to decide the palette color, changing the color of the icons next to the layer name in the **Layer** palette. It is used to organize layers easily by grouping them by color. For instance, when making an image with many characters, each layer related to one character can be assigned a layer color for easy identification.

The second drop-down menu on the left is **Blending Mode**, which applies different color effects to the drawings beneath the layer. A full explanation of **Blending Mode** can be found in *Chapter 16, Using Clip Studio Paint to Color Your Manga.*

To the right of the **Blending Mode** drop-down menu is a slider. This controls the opacity of the layer. Opacity refers to the amount of transparency that the objects on the layer have. If the slider is set to `100`, then the layer contents are at full opacity. If it is set to zero, then the layer contents will be completely transparent and therefore invisible.

> **Tip**
> Remember that brush tools also have opacity settings! Using a 50% opacity brush on a 50% opacity layer will give a very different look than using a 50% opacity brush on a 100% opacity layer.

Below **Blending Mode** and the opacity slider is a group of icons. The following is a list of them from left to right and a description of what each one does:

- **Clip to layer below**: Hides some parts of the image in the current layer using the layer below. Content in the current layer will only be shown in areas where there is also content in the layer below.
- **Set as reference layer**: Some tools, such as the **Fill** tool, can be set to reference their parameters with another layer. This icon turns the currently selected layer into a reference layer for these tools.
- **Set as draft layer**: This option turns the layer into a draft layer. Exporting and printing images can be set to ignore a draft layer, even if that layer is visible in the file.
- **Lock layer**: Sets the layer so that it cannot be drawn on or changed at all until it is unlocked.
- **Lock transparent pixels**: Sets the layer so that transparent pixels cannot be drawn on. Only pixels that are currently drawn on will be able to be changed.
- **Enable mask**: This enables or disables the layer mask, which can make some parts of an image transparent. You can learn more about layer masks in *Chapter 12, Making Layer Masks and Screentones*.
- **Set showing area of ruler**: Controls what layers or layer folders the ruler is visible on, such as only being visible when in the layer that contains the ruler or being able to see the ruler from any layer of the drawing.

The following screenshot is of another set of icons called the Command Bar. This set of icons allows us to execute many common layer operations directly from the **Layer** palette. It looks as follows:



Figure 5.4 – A screenshot of the Layer command bar

Let's explore these icons in the command bar, once again going from left to right:

- **New raster layer**: Creates a new layer for raster art.
- **Create vector layer**: Creates a new layer for vector art.
- **New layer folder**: Creates a new folder that layers can be placed into for organization.
- **Transfer to layer below**: This option transfers the contents of the currently selected layer to the layer below it in the stack, while leaving the empty layer behind.
- **Combine to layer below**: This option merges the currently selected layer with the layer below it while getting rid of the empty layer.
- **Create layer mask**: Creates a mask on the currently selected layer.
- **Apply mask to layer**: Makes the layer mask permanent in the layer.
- **Delete layer**: Deletes the currently selected layer and all its contents.

Below or above the command bar, depending on the device you use, is a list of the current layers of your image. As you can see in the following screenshot, each one has a symbol that looks like an eye that indicates whether or not the layer is visible. To the right of the eye icon of the currently active layer, there is an icon that looks like a pen. This indicates that this layer is the one that's currently being worked on. Above the layer name, the current blending mode and opacity are displayed so that specific layers can be found easily:

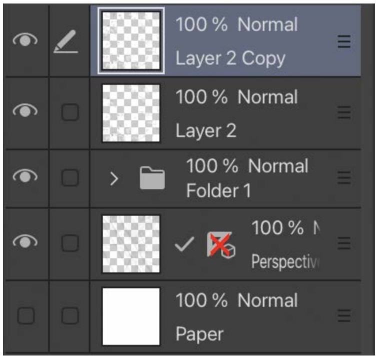


Figure 5.5 – A screenshot of the layer list

Now that we've learned all about the **Layer** palette, let's look at its companion: the **Layer Property** palette.

The Layer Property palette

The **Layer Property** palette is shown above the **Layer** palette in the default interface layout. If you cannot find the **Layer Property** palette, it can be restored by going to the **File** menu and clicking on **Window | Layer Property**.

The **Layer Property** palette gives us some more options for working with layers. It is shown in the following screenshot:

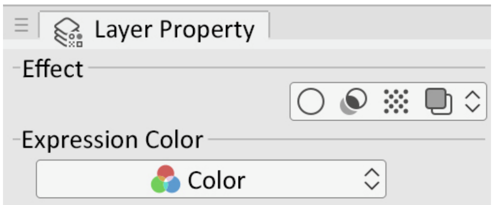


Figure 5.6 – A screenshot of the Layer Property palette

Though it's a little palette, it can do big things. Let's explore each of its options now.

Border effect

The **Border effect** icon, which is the first icon on the left of the top row, can be used to get two different looks on a layer. The most common way to use it is to add a stroke to the outside of the content of a layer. To do this, click on the left-most icon of the **Border effect** options to activate the **Edge** option. The following is a screenshot of **Border effect** in action on a layer of text:

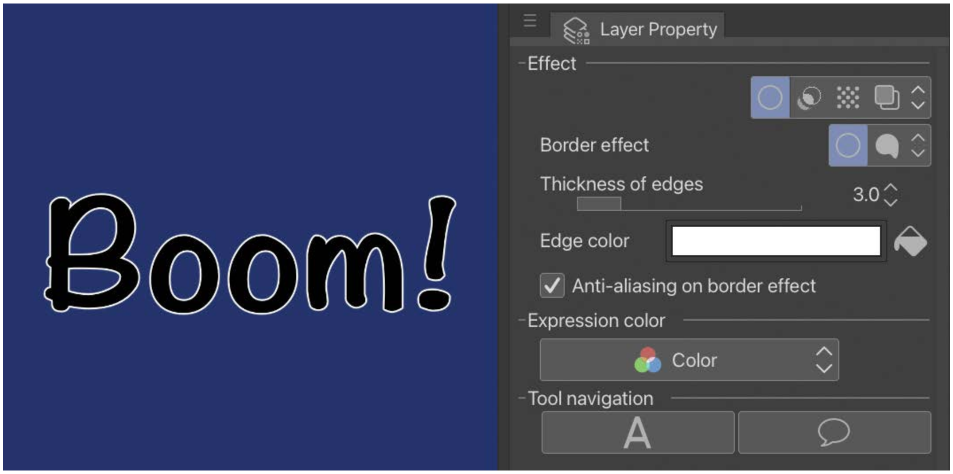


Figure 5.7 – A screenshot of a text sample and the Layer Property palette

By setting **Thickness of edges**, the thickness of the border can be made thicker or thinner by adjusting the slider or using the up and down arrows to the right of the slider. **Edge color** can be set by clicking on the rectangle showing the current color and choosing a new color using the color picker window.

Border effect also has another setting, though, and that is the **Watercolor edge** effect. This effect looks very different from the edge effect and has a lot more options, and it can be used to give a piece of art a slick look that is reminiscent of traditional watercolor.

To access the **Watercolor edge** effect, click on the icon next to the **Edge** option under the **Border effect** heading of the **Layer Property** palette.

In the following screenshot, the **Watercolor edge** effect has been applied to the brushstroke on the right in the following screenshot:

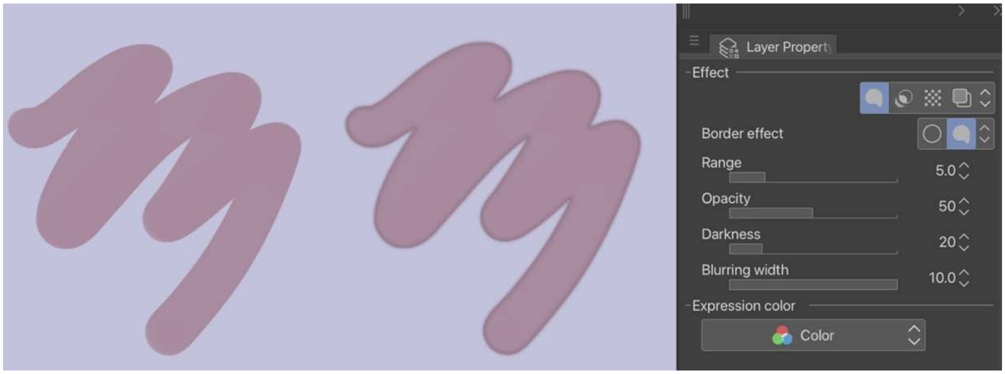


Figure 5.8 – A screenshot of an image sample with the Watercolor edge effect applied

Notice how the stroke on the right has a dark edge around the outside, which is just how watercolor paint would react if it was layered over dry paint. The look of this effect can be changed by moving the **Range**, **Opacity**, **Darkness**, and **Blurring width** sliders. There is no *ideal* setting for this option, but moving the sliders around will update the layer in real time, so it's very easy—and fun!—to play with.

Now that we know about the **Border effect** option, let's explore another: the **Extract line** effect.

Extract line

The **Extract line** icon is another icon under the **Effect** options in the **Layer Property** palette. This option is only available in EX version and especially useful for incorporating 3D objects into your art.

In the following screenshot, I have taken a photo of a llama and used the **Extract line** effect on it. The settings used are shown in the **Layer Property** palette in the following screenshot:

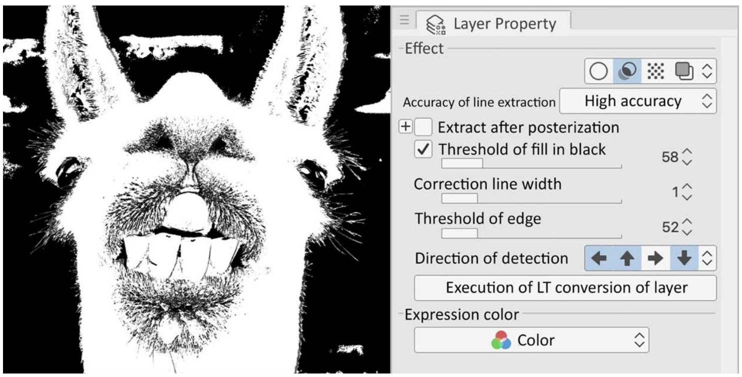


Figure 5.9 – A screenshot of a line extraction image

Using this option turns the photo into a line drawing. By adjusting the options in the **Layer Property** palette, we get a real-time preview of the line drawing. Using this layer effect does not change the source photo permanently, as the effect can be turned off at any time if we change our mind, so feel free to play around with the sliders!

This option also has another look, called **Convert to lines and tones**. This is mostly used by comic artists on 3D objects or background photographs, but we can also keep using it on our llama photo. Once we have the settings shown in the preceding screenshot just how we want them, we can click on the **Convert layer to lines and tones** button at the bottom of the **Line Extraction** settings. The following dialog will appear:

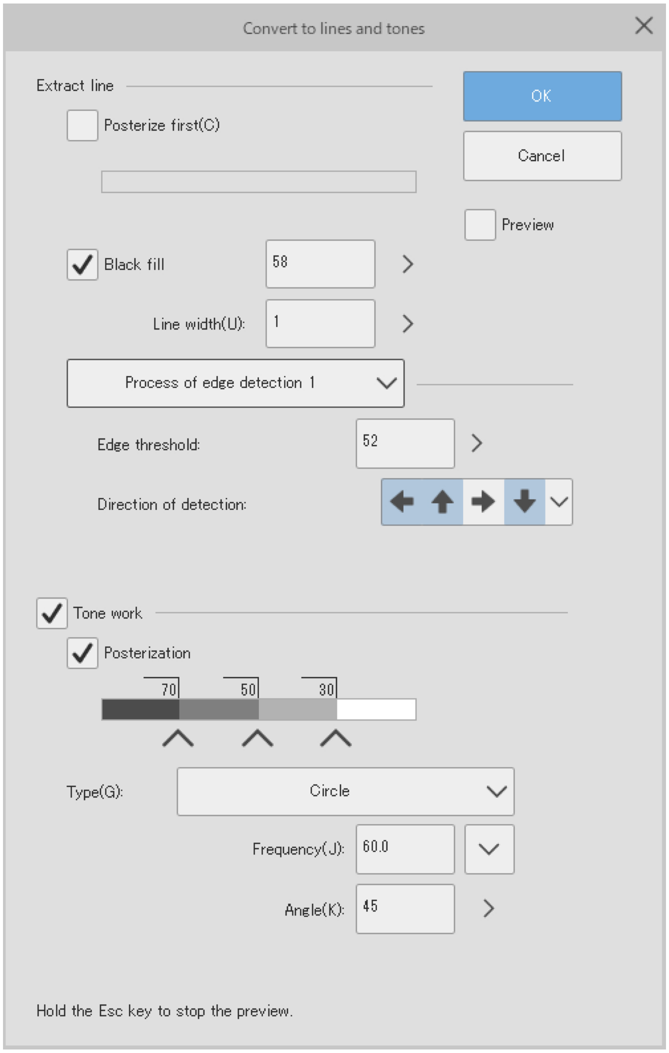


Figure 5.10 – A screenshot of the LT conversion of layer settings

Settings can be modified in this window again before continuing. To see the changes being made, make sure to check the **Preview** checkbox below the **Cancel** button. Note that the preview may be slow on computer systems with a low amount of RAM or hard disk space.

When we click on **OK**, we will get something like this:

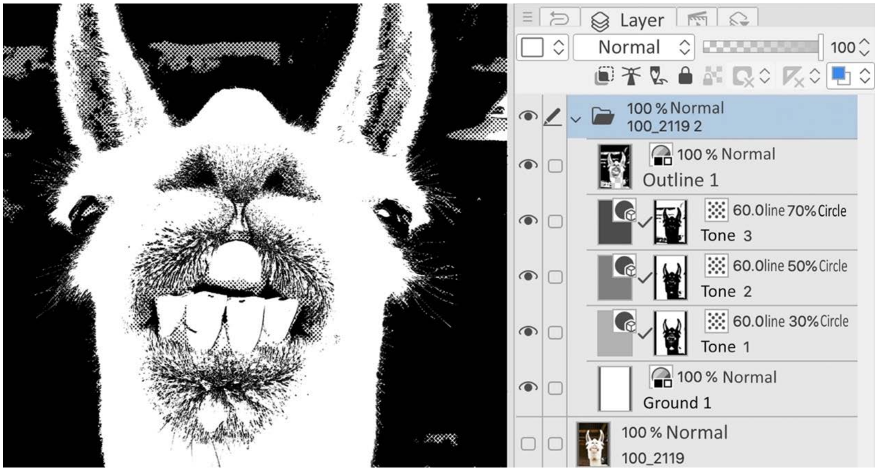


Figure 5.11 – A screenshot of a photo with the Layer palette

Clip Studio Paint automatically creates an outline layer and several layers of tones, depending on the settings we specified in the previous window. Looking in the **Layer** palette, we can also see our original image safely saved on a layer below the tones and the outline layer. This means we don't have to worry about making changes to a photo and then not being able to undo them. If we don't like the final results of the conversion, the action can be undone, or the layers deleted, and we can try again to get a different result.

The next effect option is similar but can give us an entirely different look!

Tone

The next icon in our **Layer Property** effect options is the **Tone** effect. Just as the name implies, this takes our layer and turns it into screentones, depending on the contents of the layer.

What is a screentone? If you read Japanese manga, you've probably seen screentones but never knew what they were called! A **screentone** is a pattern of dots, lines, or hatches used to apply shading or texture to any area. In traditional pen-and-paper drawing, these tones were applied using a sticker-like sheet of pre-printed patterns that would be applied over the top of the drawing. Some companies even started printing background images, such as photos of city skylines or forests, to make the comic creation process faster and easier. This is now easy to create using digital tones. Using digital tones means we don't have to replenish our screentone supplies, because we never run out, and we can make custom tone backgrounds using photos.

> **Tip**
> Only use photographs in your art that you have taken yourself or that you have permission to use. Remember, just because you found a photo through a Google search doesn't mean that you have the right to use it! Be sure that the owner of the photo is okay with it being used, even if you're not going to be selling the piece of art that you're making.

In the following screenshot, a photo of a shrine has been used and the **Tone** layer effect has been applied to it:

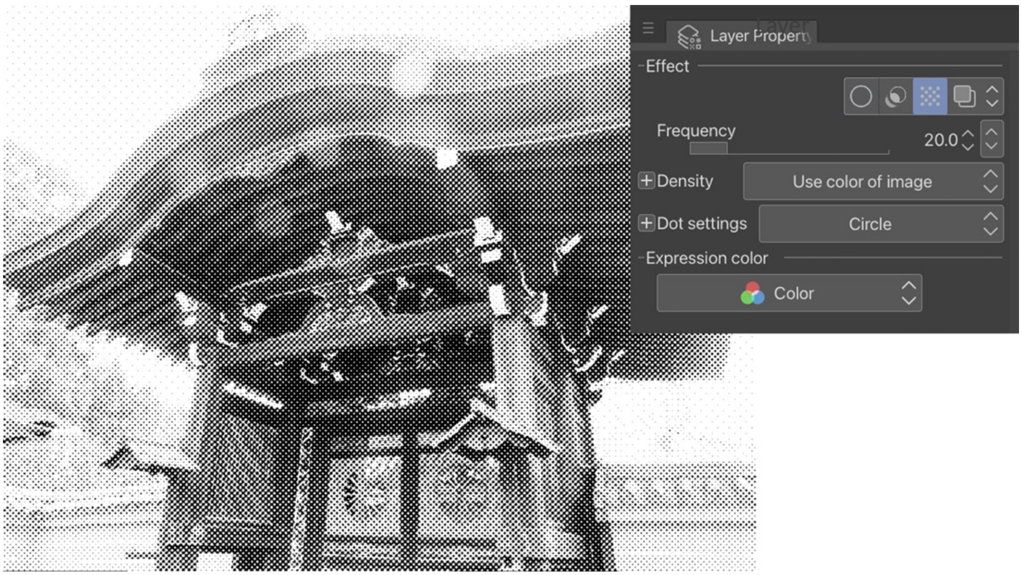


Figure 5.12 – A screenshot of a photo with a Layer Property palette

We also have several options for this effect, such as setting **Frequency**, which will make the screentone dots more or less numerous. Note that the higher the number set with this slider, the smaller the dots will become. **Density** can be set in accordance with the color or brightness of the image. Changing this setting to increase the brightness will make lighter parts of the image more transparent. **Dot settings** can be used to change the shape of the dots that make up the screentone pattern. There are many options, from the standard circle to stars, flowers, hearts, and more!

Now let's talk about the last effect option.

Layer color

The **Layer color** effect is simple and is the one that you will use most for day-to-day artwork. Here's an example of the Layer color effect at work in the following screenshot, using our photo of the shrine again:

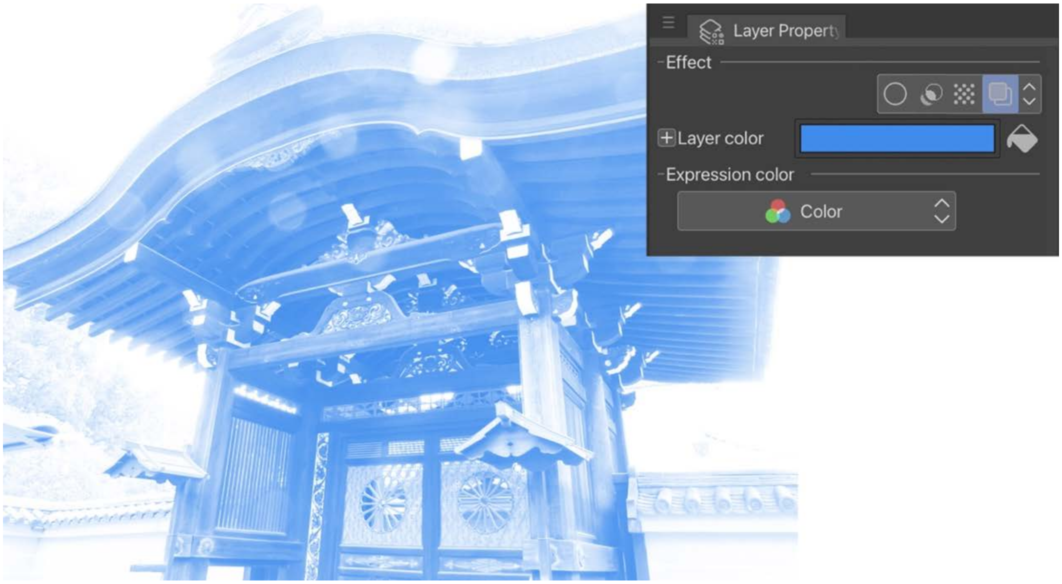


Figure 5.13 – A screenshot of a photo with a Layer color effect

The **Layer color** option takes the contents of the selected layer and tints them based on the color set by the user in the **Layer color** selection box. By default, this is set to a light blue color that is reminiscent of non-photographic blue pencil art from traditional comics. This is a non-destructive way to tint our layer, as we can simply click on the **Layer color** icon again to change the layer back to its original colors.

The most common way to use this option is to make your finished pencil sketch layer blue before inking.

Expression color

The final part of the **Layer Property** palette is the **Expression color** drop-down menu. This menu is shown in the following screenshot:

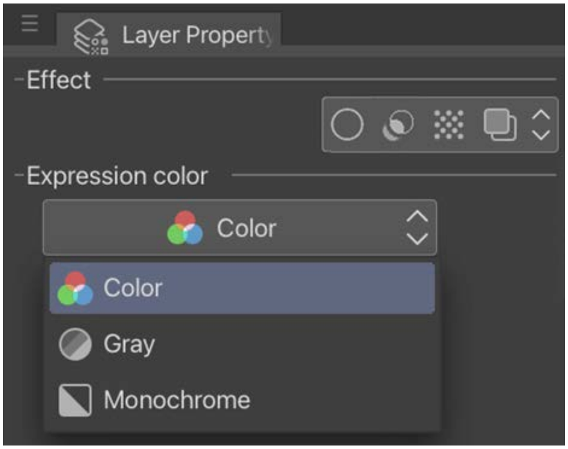


Figure 5.14 – A screenshot of the Expression color options

With this menu, we can set the color mode of each layer in our document. For instance, for crisp line art, we could set our ink layer to be only black and white pixels by selecting the **Monochrome** option. Layers for pencil sketches can be set to **Gray**, and only layers that contain color content can be set to **Color**. This control over the individual layers' color modes can help to reduce file sizes in large files with lots of layers, so keep that in mind when you're working!

Now that we know what the icons and menus in the **Layer** and **Layer Property** palettes do, let's explore some things that you can do with layers.

Working with Layers

Layers are a powerful digital art software tool, but only if you know how to use them effectively. Many artists switching from doing their pieces on paper have a difficult time figuring out how to work in layers. In this section, we are going to create a few new layers and keep them organized by renaming them and changing their color in the **Layer** palette.

Follow these steps in order to create a new file with layers set up to take a drawing from a rough draft to ink:

1. Create a new file. Use the **A4 Color** template under the **Show all comic settings** icon for more information on creating new files and using templates. If you are using Clip Studio Paint EX, don't turn on the **Multiple Page** option for this file. We just want one page to work on for this exercise.
2. Once we have hit **OK** and our file is created, we should have a **Layer** palette that looks as follows:

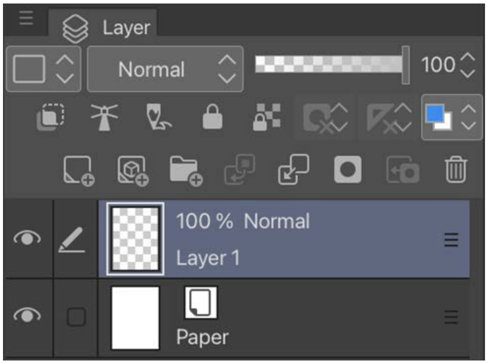


Figure 5.15 – A screenshot of the Layer palette with a new layer

3. Double-click on the words **Layer 1** in the **Layer** palette to rename the layer. When the text entry box appears, name the layer **Roughs**. Hit the *Enter* key on your keyboard to confirm the new layer name. Now our **Layer** palette looks like this:

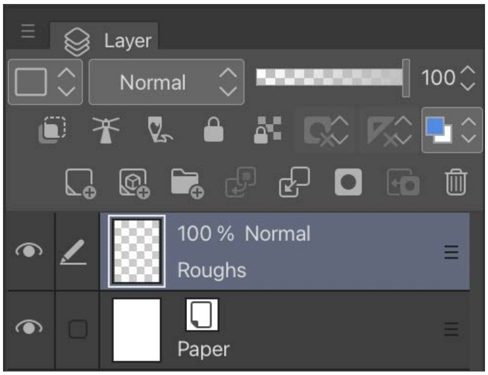


Figure 5.16 – A screenshot of a layer with a new name

4. Use the **Change Palette Color** drop-down menu to change the **Roughs** layer to blue. This is to allow us to quickly identify the **Roughs** layer in the stack of layers. Now our **Layer** palette looks like this:

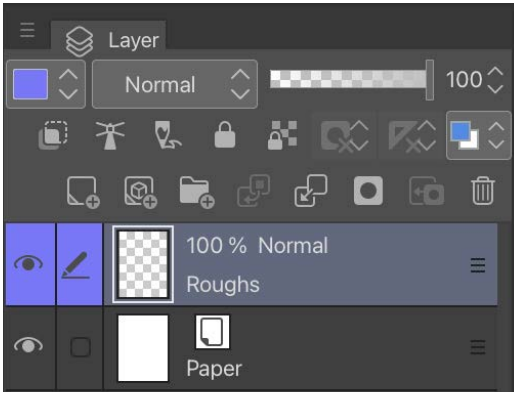


Figure 5.17 – A screenshot of the Layer palette

5. Create a new layer by either clicking on the **New Raster Layer** icon above and left of the layer or at the bottom of the **Layer** palette, depending on your interface or device. You can also go to **Layer | New Raster Layer** in the **File** menu at the top of the screen. Using the process outlined in *steps* 3 and 4, name this new layer **Finished pencils** and set the color to green. Now our **Layer** palette should look as it does in the following screenshot:

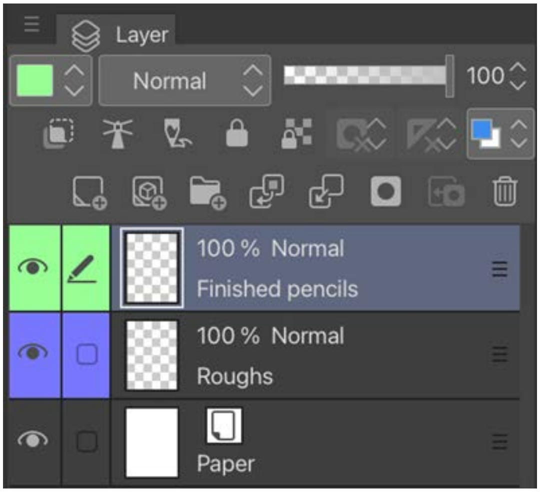


Figure 5.18 – A screenshot of three layers

6. Using the preceding steps, create another layer with the name **Inks** and set **Palette Color** to **Red**.
7. Now we are going to create a **Layer Folder** to hold our **Roughs** and **Finished pencils** layers. Create a **Layer Folder** by clicking on the **Finished pencils** layer in the stack to select it (the currently selected layer will display as blue in the **Layer** palette). Now click on the **New Layer Folder** icon at the top of the palette (or at the bottom of the **Layer** palette, depending on your device). Also, you can use **Layer | New Layer Folder** in the **File** menu. Now our **Layer** palette looks like this:

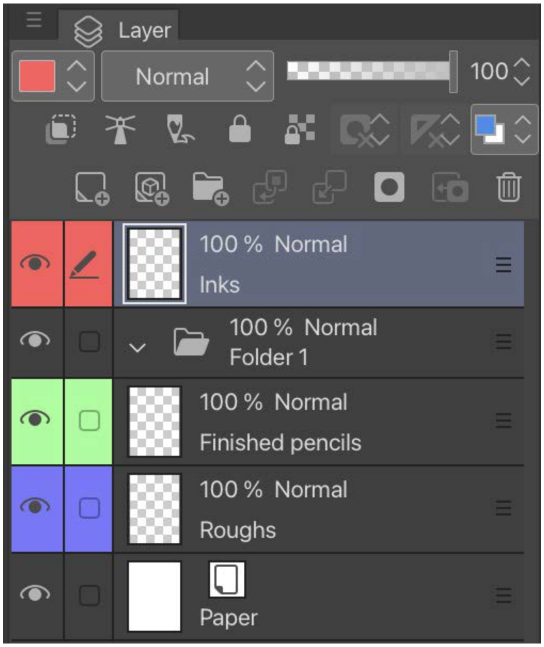


Figure 5.19 – A screenshot of four layers and a folder

8. Double-click on the words **Folder 1** to bring up the text entry box to rename the folder. Change the name to **Pencils** and press the *Enter* key on the keyboard to finalize the name change.

9. Select the **Finished pencils** layer and hold down the *Shift* or *Ctrl* button on the keyboard as you click on the **Roughs** layer in order to select both pencil layers at the same time. Both layers will turn blue when they are selected together. Now use the mouse to drag the layers into the **Pencils** folder. You will know they are in the correct position when a red rectangle is shown around the folder while the mouse is over it, as in the following screenshot:

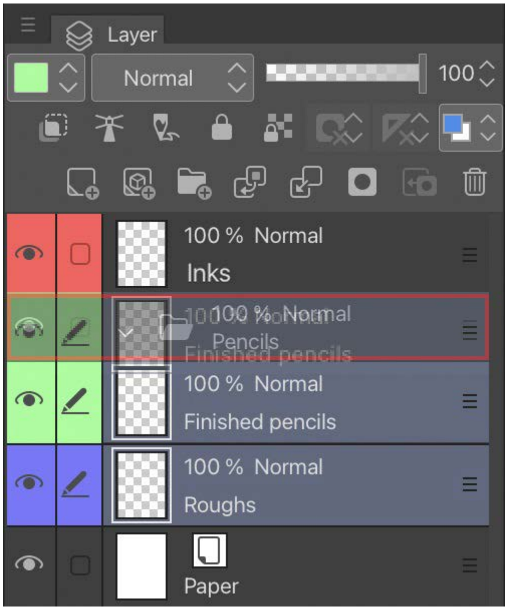


Figure 5.20 – A screenshot of us adding layers to a folder

10. Release the mouse button to complete the move to the layer folder.
11. Save your file. We will be drawing on these layers in the next chapter.

We now have a stack of layers (and a layer folder!) that looks like this:

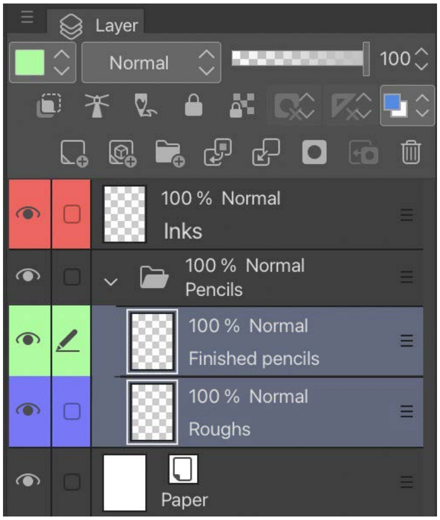


Figure 5.21 – A screenshot of layers in a folder

Of course, this is just one of the many ways to use and organize layers. As you continue to work in digital layers, you will find your own style of using them. Some artists use many, many layers in a completed work, while some may only use a few layers.

Personally, I try to keep my layers down to a minimum, but larger color pieces with lots of characters can quickly see the stack get pretty high!

> **Tip**
> Got lots of layers and having a hard time finding the one that you need to work on? Use the **Search Layer** palette to quickly display layers by type and modifier in order to find your layers quickly. The **Search Layer** palette can be found as a tab in the same window as the **Layer Property** palette.

Summary

In this chapter, we learned what layers are and explored their benefits in the digital art world; layers give brilliant freedom for experimentation while protecting each element of your artwork, making your piece easy and safe to edit. We learned about the **Layer** palette and the various options and icons it has. We also learned about the **Layer Property** palette and the different effects it can have on our layers. Then, we made a file and set it up with three new layers, and we made a layer folder that is ready for us to begin creating. In the next chapter, we will learn about erasers and how we can use them.

6
Erasers, Selections, and the Sub View Palette

Whether you draw with pencils on paper and then ink digitally or draw digitally from start to finish, there is a certain amount of refinement needed in most art processes. We will use a variety of tools in this chapter to refine our images, from erasers to selection tools that allow us to scale and rotate sections of our image. We will also learn about a great feature of Clip Studio Paint, the **Sub View** palette, which allows us to store and use reference images easily.

In this chapter, we will cover the following topics:

- Erasers and using transparent color as an eraser
- Lassos and other selection tools
- Loading reference images to the Sub View palette
- Using Layer Color to prepare a sketch

Let's get started with refining our pencil work!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device and a new canvas opened with any dark color. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

Eraser Tools and Transparent Color

There is a selection of dedicated eraser tools in Clip Studio Paint that is accessed by clicking on the Eraser icon in the toolbar and then choosing an option from the **Sub Tool** palette. Each of these eraser sub tools has a different use. But, by using the transparent color selection in the color picker option in the toolbar, we can also transform any mark-making tool into an eraser. Before we get into the transparent color, though, let's talk about some of the eraser tools in Clip Studio Paint and what they do.

The Eraser Tools

Once you start drawing, you need an eraser to correct a mistake or give a half-erased texture to your image, which is exactly the same in digital drawing. There are various useful erasers in Clip Studio Paint. The following screenshot shows the Eraser sub tools in Clip Studio Paint:

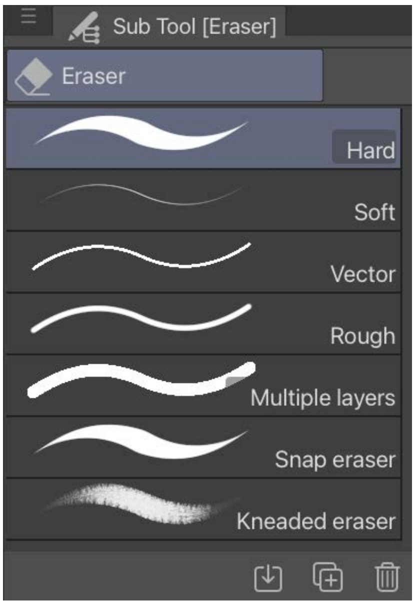


Figure 6.1 – Screenshot of the Eraser sub tool menu

Each of these tools has a different look and use. Let's briefly explore each one now.

> **Tip**
> If you are using a graphics tablet that has an eraser end to the stylus, like some models of **Wacom** tablets have, then the currently selected eraser sub tool will be the one used when the eraser button on the stylus is activated.

Hard eraser

The Hard eraser is a pressure-sensitive eraser tool with a hard edge. Since it is pressure-sensitive, when a graphics tablet is being used, it is a very versatile tool because simply varying how hard you are pressing with the stylus changes how small or large the area being erased becomes.

The following screenshot shows an example of the Hard eraser tool in action:

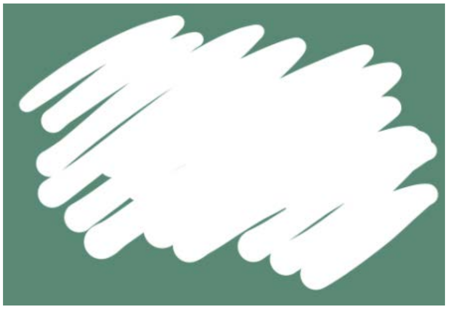


Figure 6.2 – Screenshot of the Hard eraser

You can see this eraser has a very clear edge; it comes in handy when you want to erase particular sections with defined edges I can say this is the most basic eraser!

Soft eraser

The Soft eraser is also a pressure-sensitive tool. It has a soft, blurry edge to it, as shown in the following screenshot:

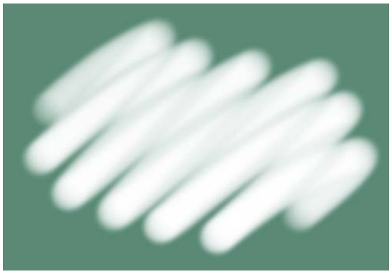


Figure 6.3 – Screenshot of the Soft eraser

This eraser is great for using in effects, such as fading one color to another or making a subtle gradient. It can be used for general erasing as well.

Rough eraser

The Rough eraser tool is a non-pressure-sensitive tool with a hard edge. Because it is not pressure-sensitive by default, the size of the tool will remain consistent, despite any variations in the pressure on the stylus.

The following screenshot shows an example of the Rough eraser in use:



Figure 6.4 – Screenshot of the Rough eraser

Since it is not pressure-sensitive, it's better to use it for rough sketches rather than detailed drawings.

Vector Eraser

The Vector eraser can be used on raster layers, but it is most useful on vector layers. We will be discussing vector layers in detail in *Chapter 10*, *Vector Layers and the Material Palette*.

Multiple Layers Eraser

The Multiple Layers eraser tool erases content from multiple layers at a time. It will delete the content of the area where it is used from every layer in the stack. The following screenshot shows an image composed of two layers, a background color layer and a layer with a light-colored square on top of the background:



Figure 6.5 – Screenshot of multiple layers

When the Multiple Layers eraser is used, parts of the top layer with the square on it are erased, but parts of the bottom background color layer are also erased at the same time.

This is shown in the following screenshot:

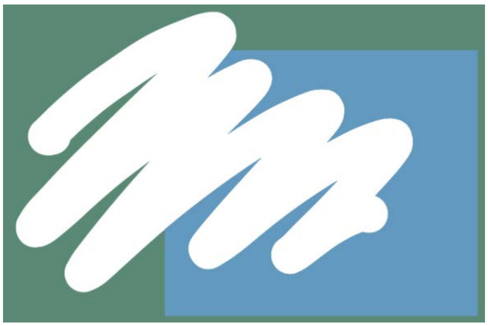


Figure 6.6 – Screenshot of the Multiple Layers eraser

Tip

Got a speck or splotch on your image that shouldn't be there, but can't find the layer it's on? The Multiple Layers eraser can take care of it quickly. Just make sure you're not erasing part of the image that you want to keep in the process of using it, though!

Snap Eraser

If you need to erase only a part that is aligned to the ruler, this is the tool for you.

This eraser snaps to the ruler shape, so other parts of the image will not be affected. You can see this in the following screenshot:

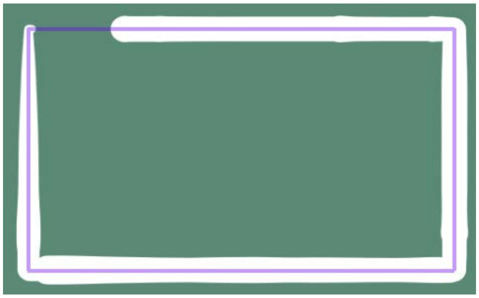


Figure 6.7 – Screenshot of the Snap eraser

We discuss **rulers** further in *Chapter 13*, *All About Rulers*.

Kneaded Eraser

For artists who want more of an analog look to their drawings, this Kneaded eraser (or as some artists might refer to it as a *putty rubber eraser* in traditional drawings) does a good job. It offers very delicate erasing work on the drawing, as seen in the following screenshot:



Figure 6.8 – Screenshot of the Kneaded eraser

Now that we've talked about our dedicated eraser tools, let's talk about using the transparent option in the color picker to turn any tool into an eraser.

Using Transparent "Color"

At the bottom of the toolbar in the Clip Studio interface are two squares that show the currently selected foreground and background colors. Below these is also a rectangle filled with a checkerboard pattern. This is shown in the following screenshot, underneath the foreground and background color selections:

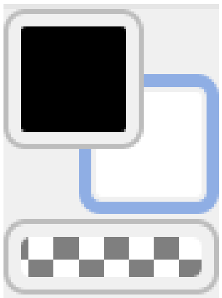


Figure 6.9 – Screenshot of the toolbar color swatch

The checkerboard pattern is how transparency is shown in digital art programs. Having this transparent swatch means that we can quickly turn any tool into an eraser just by changing our color selection to transparent.

How is this helpful? Imagine drawing or inking and seeing that an error has been made that needs to be erased. Instead of switching to an eraser tool (a process that can sometimes take two button clicks), a simple click of the transparent swatch turns your current pencil or pen into a convenient eraser!

This option can also be used to make special effects with textured erasers. The following screenshot shows the Chalk brush (under the Pastel sub tool group) being used as an eraser with the transparent option:

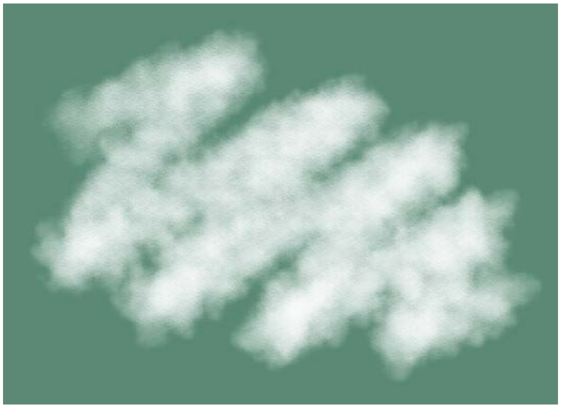


Figure 6.10 – Screenshot of erasing by using the Chalk tool

Even tools such as the pattern brushes in the Decoration category can be used as erasers. The Star A brush is shown here:

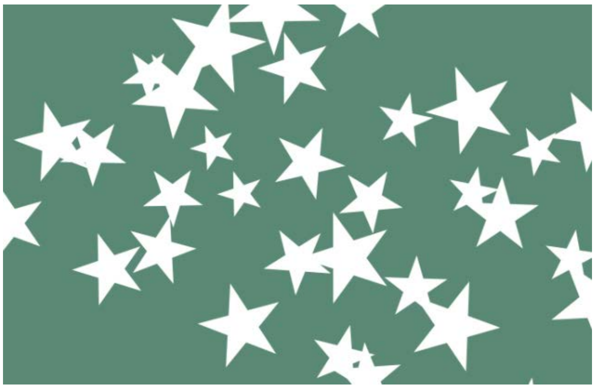


Figure 6.11 – Screenshot of erasing with a Star A brush

Of course, these are just a few examples of the effects that can be achieved by using transparency as a painting color.

Surprisingly, there are more ways of erasing and editing your art! Let's move on to the various selection tools that can be utilized in Clip Studio Paint.

Lassos and other selection tools

One of the most useful features of creating art in a digital space is the ability to move, scale, rotate, flip, and otherwise transform all or parts of the drawing to obtain exactly the right look. In this section, we will use selection tools to clean up and correct a sketch with several errors on it. You can follow along with a sketch of your own, or use the following sketch as a reference. These tools can be used with any sketches on your canvas.

The following is the sketch that we will be looking at for this section:

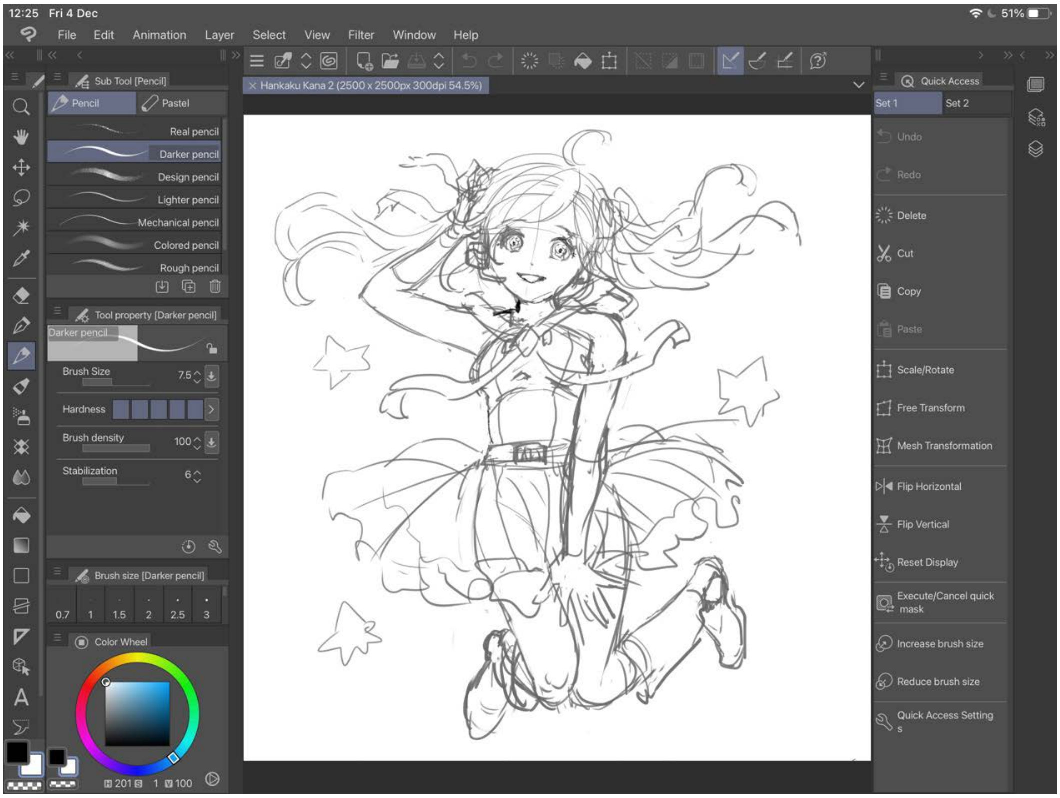


Figure 6.12 – Screenshot of a sketch with the Clip Studio Paint interface

There are several issues with this drawing, and we will use the selection and transformation tools to correct them. The character's left hand is a little too big, the bunch of hair on top of the head needs to be a different shape, and the headdress ribbon needs to be shaped better. Let's use the selection area and other selection tools to fix these problems.

The Rectangle and Ellipse selection area tools

The Rectangle and Ellipse tools both work the same way; the only difference is the shape of the selection they produce. This is probably obvious, but the Rectangle tool produces squares and rectangles, and the Ellipse tool produces circles and ellipses. We can use these tools when our selection doesn't need to be precise. For the sketch we are going to be correcting, we will use the Rectangle tool to correct the size of the character's left hand in our drawing.

Even though we are going to use the Rectangle tool, the Ellipse tool operates in exactly the same way.

Let's use the Rectangle tool and the Selection Launcher options to resize a portion of our drawing by following the steps here:

1. Identify the area of the drawing that needs refining. In the case of our sketch, we will be resizing the character's hand to correct the proportions.
2. Select the **Selection area** icon from the toolbar. Then, select the **Rectangle** tool from the **Sub Tool** palette.
3. Using the mouse or stylus, hold down and drag the Selection area tool around the section of the drawing to be selected. When the appropriate area is outlined, release the mouse or stylus button to complete the selection. The following screenshot shows an example of a rectangle selection:

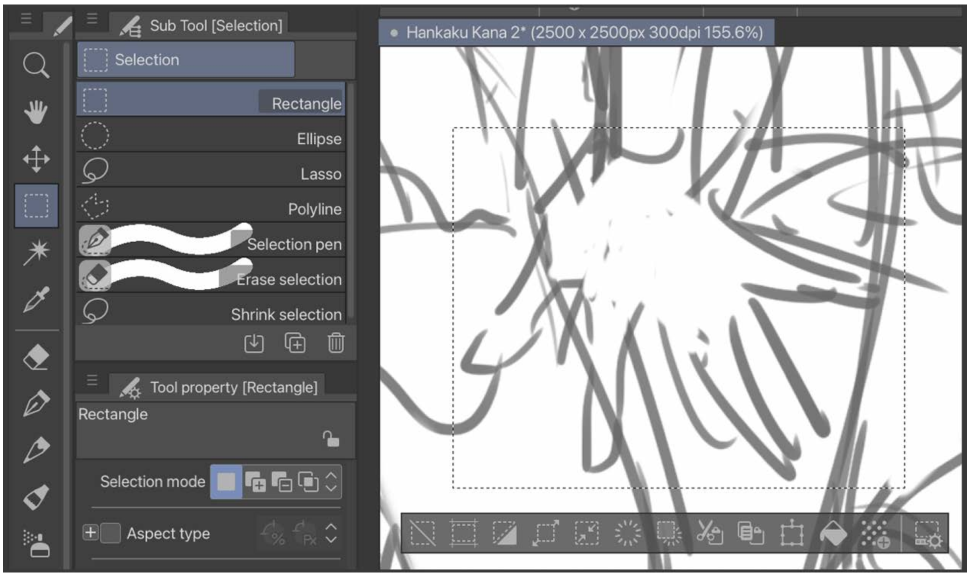


Figure 6.13 – Screenshot of a rectangle selection

4. Select the **Scale/Rotate** icon, which is the fourth from the right on the **Selection** Command Bar. Use the square handles at the corners of the selection to resize the section of the drawing by dragging them in or out.
5. If an undesired change is made, click on the **Cancel** icon beneath the selected area.
6. Once the area matches the newly desired size, click on the **OK** button beneath the selection or press *Enter* on the keyboard to commit the changes. Note that if you try to select a different tool or perform another operation while the selection is still in transform mode, a message will appear asking whether you would like to commit the changes.
7. Use the Eraser and Brush tools to correct any areas in the sketch that do not align. In the following screenshot, the lines of the legs and the skirt were redrawn after the hand was resized:

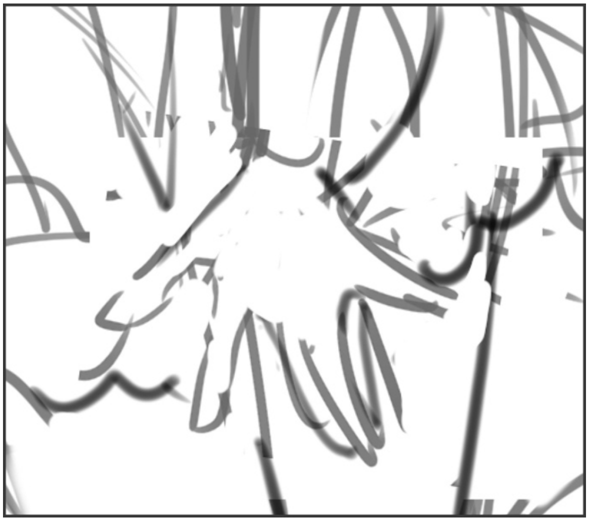


Figure 6.14 – Screenshot of the resized hand image

Rectangles and circles are all well and good, but what about when we have an area that is a much more complicated shape than that? Let's learn how to use the other tools from the Selection Command Bar.

The Selection Launcher

Let's look at the Launcher that appears just underneath the selection you made. You just have to use one of the functions, but it's always good to know other important functions. The Selection Launcher contains useful tools, as the following screenshot shows:



Figure 6.15 – Screenshot of the Selection Command Bar

From left to right, the options in the Selection Launcher and their functions are as follows:

- **Deselect**: Clears the active selection
- **Crop**: Resizes the image to the current selection
- **Invert selected area**: Reverses the selected area
- **Expand selected area**: Makes the selection larger
- **Shrink selected area**: Makes the selection smaller
- **Delete**: Deletes the contents of the selection
- **Delete outside selection**: Deletes the contents that are outside of the selection
- **Cut and paste**: Cuts the selected content out and pastes it to a new layer
- **Copy and paste**: Makes a copy of the current content of the selection and pastes it to a new layer
- **Scale/Rotate**: Scales or rotates the contents of the selection
- **Fill**: Fills the selection with the currently active color
- **New Tone**: Fills the area with a screen tone based on set parameters
- **Selection Launcher Settings**: Personalizes the Selection Launcher settings

The Lasso and Polyline selection area tools

For more complicated selections, the Lasso and Polyline tools are good tools to know about. These both work in relatively the same way. The Lasso tool is being used in the next set of instructions, but the Polyline tool will also be covered.

The Lasso tool allows for curves and rounded selection areas, while the Polyline tool can make complex shapes but each segment of the selection area must be a straight line.

Follow these steps to select and horizontally flip a selected area of the drawing:

1. Identify the area of the drawing to be selected and choose the appropriate tool from the **Selection area** category of sub tools. To use the Lasso tool, hold down the mouse or stylus button and drag to trace around the area, releasing the button once you're back to the starting point. An example of the lasso tool is shown below, around the bunch of hair:

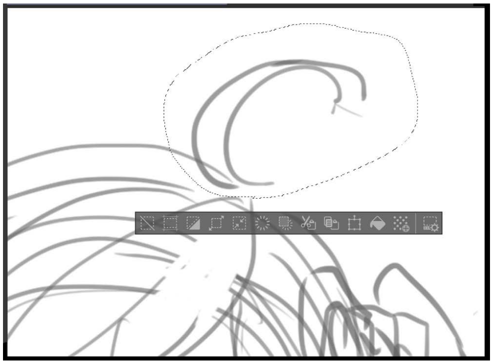


Figure 6.16 – Screenshot of the Lasso selection area

2. To use the Polyline tool, click with the mouse or stylus and move to another area. Click again to set another point of the selection area border. Continue this process until you come around to the beginning point to complete the selection area, or double-click to draw a straight line from the current point to the starting point. The following screenshot shows the process of selecting a section using Polyline just before clicking the starting point:

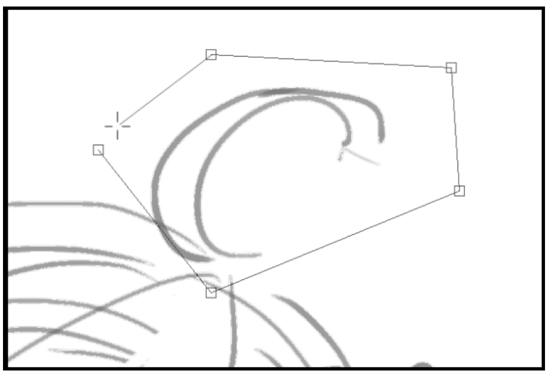


Figure 6.17 – Screenshot of the Polyline selection area

3. To begin the transformation process, click on the **Scale/Rotate** icon, which is fourth from the right in the Selection Launcher.
4. In order to flip the selection area horizontally, we need to look at the **Tool property** palette. The **Tool property** palette is shown in the following screenshot:

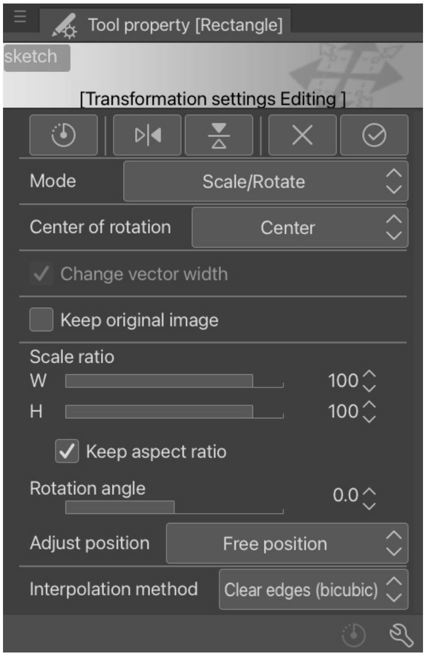


Figure 6.18 – Screenshot of the Rectangle tool's Tool property palette

5. In the set of rectangular icons at the top of the **Transformation settings**, click on the **Flip Vertical at center of rotation** icon, which is the second from the left, to mirror the currently selected area vertically.
6. Adjust the selection area to the correct position, then click on the **OK** icon beneath the selection or press *Enter* on the keyboard.

7. The flipped and adjusted section of the drawing is shown here:



Figure 6.19 – Screenshot of the flipped part

Yes, the bunch of hair is now a mirror image!

You have seen several different ways to erase part of your art. Isn't it great to know more about editing your art using rich functions for selection tools?

Using the Tool property palette for scaling or rotating a selection

As mentioned previously, the **Tool property** palette for the Selection area tools changes its contents when the Scale/Rotate function is activated with a selection. The **Tool property** palette becomes a transformation command center, and it's really important to know what it's capable of! Let's take a closer look at this palette before we move on.

The **Transformation settings** area in the **Tool property** palette are shown here:

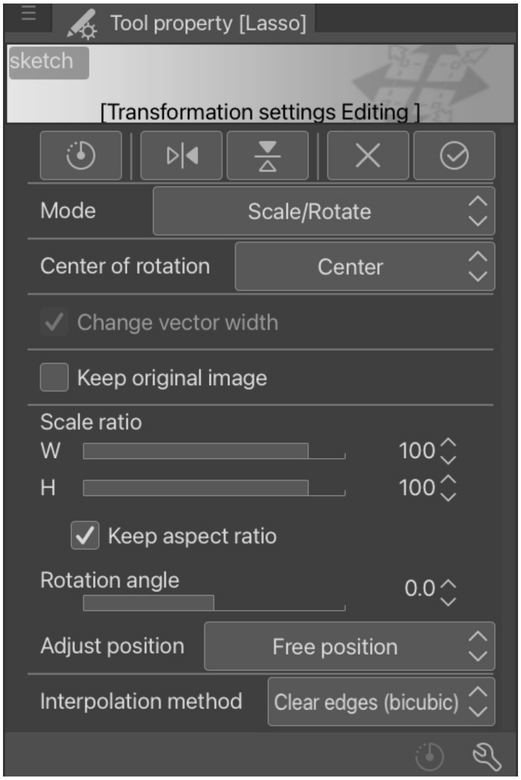


Figure 6.20 – Screenshot of the Lasso tool properties

These settings are accessible when either a selection area or the contents of an entire layer are being scaled or rotated. To transform the contents of an entire layer, simply select the layer from the **Layer** palette, then click on the **Scale/Rotate** icon in the main menu at the top of the interface window, between the **File** menu and the **Canvas Display** area. A bounding box will appear around the contents of the layer.

The **Transformation settings** area has five icons at the top of the palette. From left to right, the following list describes the function of each of these icons:

- **Reset current transformation** will undo all changes made to the current area being transformed and revert it to the initial settings.
- **Flip horizontal at center of rotation** flips the area being transformed in the horizontal direction based on the center of rotation.
- **Flip vertical at center of rotation** flips the area being transformed in the vertical direction based on the center of rotation.

- **Cancel current transformation**: Cancels the present or newly made transformation.
- **Confirm current transformation**: Commits the transformation change. This icon does the same as pressing the **OK** icon below the bounding box or pressing the *Enter* key on the keyboard.

Below these icons are other transformation options, described here:

- **Center of rotation**: Allows the rotation point to be set in the current bounding box. The default setting is the center of the area being transformed, but other options can be chosen from the drop-down menu.
- **Change vector width**: This is only used when transforming vector images. We will discuss vectors in more detail in *Chapter 10*, *Vector Layers and the Material Palette*.
- **Keep original image**: This will retain the original image when the transformation takes place. For instance, with this box checked, if we move a selection to the left, then Clip Studio Paint will copy the area being transformed and create two instances of it. In the following screenshot, the character sketch has been moved while this box is checked, resulting in a twin of the original sketch being created:



Figure 6.21 – Screenshot of the duplicated image

- **Scale ratio**: Controls the ratio of both the width and height of the area being transformed. Using the sliders, the selection can be transformed precisely on either axis. Activating the **Keep aspect ratio** checkbox below the sliders will ensure that the original proportions of the transformed area are preserved so that the image doesn't become skewed in either direction.
- **Rotation angle**: This is a slider that controls the rotation of the area being transformed. This slider can be used to rotate a selected area precisely. Alternatively, moving the mouse cursor to a corner of the bounding box and slightly to the outside of it will produce a curved double-headed arrow that can be used to free-rotate the selection.
- **Adjust position**: This is a drop-down menu that controls the position of the transformed area. Setting this to **Free position** allows us to move, rotate, and scale the transformed area however we wish. Another setting is **Canvas**, which automatically resizes the selection area to the size of the canvas and sets it in the center.
- **Interpolation method**: This contains the options for how Clip Studio Paint blends colors of adjacent pixels during scaling up and down. The **Smooth edges (bilinear)** setting blends colors of adjacent pixels and smooths them, but this may lead to a blurry outline depending on the content being transformed. **Hard edges (nearest neighbor)** maintains a sharp color separation by not blending based on adjacent pixels; however, this may lead to unwanted rough edges. **Clear edges (bicubic)** blends and smooths the color separations for a smooth transition, and when the image is rotated, the outline is processed so that it is more emphasized than the **Smooth** option. White noise may occur around the outline, however. **High accuracy (average colors)** calculates the average color of each pixel contained in an image after transformation. The image becomes clear when it's enlarged, and softer when it's shrunk. A thin line will not be interrupted when it's shrunk. However, the edges of the shrunk image can be blurred and you may need to go back and forward with other options to get your desired result on an image that contains a lot of thin lines.

Now let's learn about some more organic selection tools.

Selection pen

The Selection pen is another sub tool of the Selection area tool category. To use the **Selection pen**, select it from the **Sub Tool** palette. Then use the mouse or stylus to draw out a selection. The green area in the following screenshot is our area of selection:



Figure 6.22 – Screenshot of the area selected with the Selection pen

Any area highlighted by the Selection pen (which defaults to a bright green color for highlighting) will be included in the selection. The following screenshot shows the selection that is made from the highlighted area:

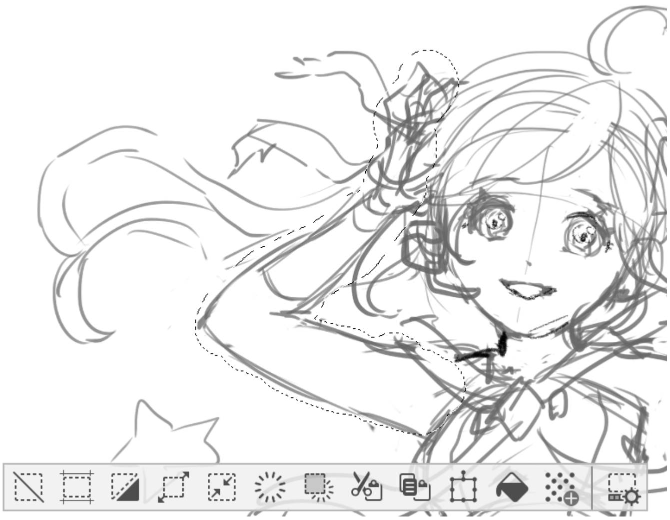


Figure 6.23 – Screenshot of the selected area

The Selection pen makes highly precise selections easier. If you need to make a smaller selection, simply make the Selection pen brush size smaller. To select large areas, make the brush size larger.

> **Tip**
> To add more areas to a selection, hold down the *Shift* button on the keyboard while moving the mouse or stylus. To remove areas from a selection, hold down the *Alt* key. A + or - symbol will show next to the selection tool cursor to indicate whether areas are being added or taken away.

Shrink selection

The Shrink selection tool allows us to quickly and easily isolate elements of a drawing without the tedium of having to be overly precise. Follow these steps to use the Shrink selection tool:

1. Select the **Shrink selection** sub tool from the **Selection area** category of tools.
2. Use the mouse or stylus to drag around the elements to be selected. As shown in the following screenshot, this selection does not need to be precise:

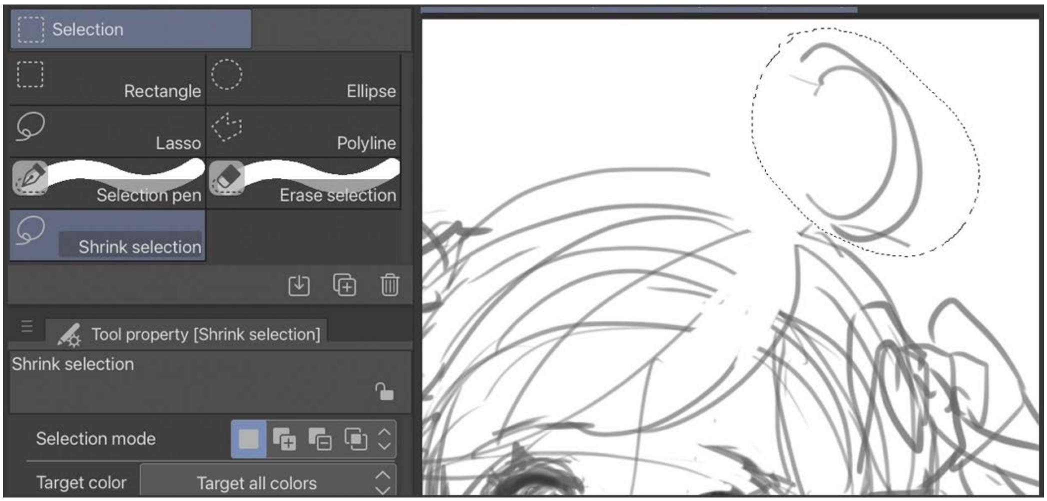


Figure 6.24 – Screenshot of the Shrink selection area

3. Once the mouse button or stylus is released, Clip Studio Paint will automatically shrink the selection down to the outside of the elements that were in the selection area. The selection made is shown in the following screenshot:



Figure 6.25 – Screenshot of the Shrink selection area and Command Bar

> **Tip**
> Note that some refinement may be needed, as is the case in the selection made in the preceding screenshot. The lighter color lines were not included in the final selection. The Shrink selection tool makes its best selections on areas with sharp, clearly defined lines, such as ones created with the Pen tools.

Clear selection

The final sub tool in the Selection area category we are going to learn about is the Delete selection tool. The following steps outline how to use the Clear selection tool:

1. Make a selection with one of the other selection tools.
2. Select the **Delete selection** sub tool from the **Sub Tool** palette.

3. Use the Delete selection tool to *draw* over the areas that are currently selected and that should be deselected. Those areas will be highlighted in green as they are drawn on, as shown in the following screenshot:

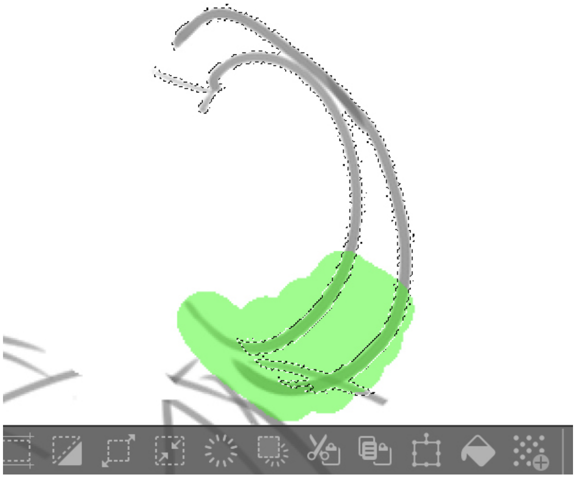


Figure 6.26 – Screenshot of the Delete selection tool

4. Release the mouse button or stylus when all areas to be cleared have been highlighted.
5. Clip Studio Paint automatically deselects areas based on the highlighted area, as shown in the following screenshot, where now only the left-most line is selected:

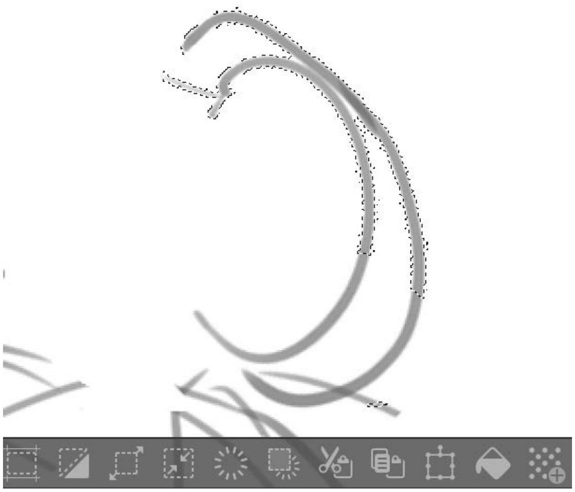


Figure 6.27 – Screenshot of the selected area after using the Delete selection tool

Now that we've learned all about the selection tools, let's learn about a palette that is a big help in organizing your reference images. Read on to learn about the **Sub View** palette.

The Sub View palette

The **Sub View** palette can seem like an enigma to some, but in truth I find it to be one of the handiest palettes in the entire Clip Studio Paint interface. Let's delve into this simple yet powerful little palette.

When you first start using Clip Studio Paint, the **Sub View** palette looks as in the following screenshot:



Figure 6.28 – Screenshot of the Sub View palette

It doesn't seem to have any purpose when you first look at it! So, what is it for?

The **Sub View** palette allows us to load images into it and view, zoom, rotate, flip, and select colors from those images. If you are a comic book artist, this palette can be used to hold character designs, concept art, background design sketches, color swatches, and any other images you may need access to on a regular basis while making comics. For illustrators, this can be used to hold reference images or other inspiration. It's a little reference library that remembers the images loaded into it so that you don't have to go through the process of opening them in new windows every time that you open Clip Studio Paint.

Let's learn how to use the **Sub View** palette now.

Loading images into the Sub View palette

Follow these steps to load images into the **Sub View** palette and navigate through the images in the library:

1. In the **Sub View** palette, click on the **Import** icon (it looks like a folder with an arrow pointing to the right). This will open your file browser.
2. In the file browser, navigate to the image to be imported. Click on the file to select it. Click **Open** to complete the import.
3. To add several images at once, hold down the *Shift* or *Ctrl* key on the keyboard and select the files, then click **Open** to import all the selected files at once.
4. Once images are loaded into the **Sub View** palette, we can see them in this palette and flip through them. The following is a screenshot of the **Sub View** palette with some of my character designs:

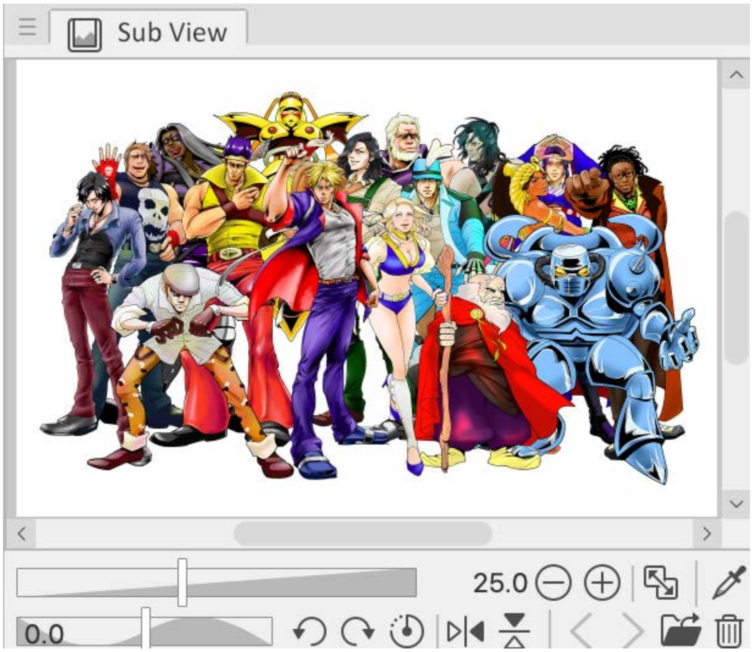


Figure 6.29 – Screenshot of the Sub View palette with an image

5. To see the other images loaded into the **Sub View** palette, locate the left and right arrows next to the **Import** icon. Clicking on either of these arrows will navigate to the previous or next image in the **Sub View** palette. Note that these arrows will only be active if more than one image is imported into the **Sub View** palette.

6. To delete an image from the **Sub View** palette, click on the **Clear** icon in the lower-right corner of the palette. This icon looks like a trash can. This will only clear the image from the **Sub View** palette and will not delete it from your computer.

Zooming, rotating, and picking a color from the Sub View images

In addition to being able to build a reference library in the **Sub View** palette, we can also zoom, rotate, flip, and select colors from those images.

To zoom into an image loaded into **Sub View**, use the slider located directly below the image view area of the palette. Alternatively, the - and + magnifying glass icons located to the right of the slider can also be used to zoom in and out little by little. The **Fit to Navigator** icon ensures that the image resizes to fit the **Sub View** window as the palette is resized. When an image is zoomed in and the color picker is not active, placing the cursor over the image will change it to the **Hand** tool and allow for dragging the image around to view specific areas.

To rotate an image in **Sub View**, the slider below the zoom slider can be used. Drag the rectangle in the center of the slider to the left or right to rotate the image. The **Rotate left** and **Rotate right** arrows can also be used to rotate the image incrementally and precisely in either direction. The following screenshot shows a **Sub View** image rotated:



Figure 6.30 – Screenshot of the rotated Sub View image

To reset the image to its original rotation, click on the **Reset Rotate** icon to the right of the rotate arrows.

To the right of the rotation settings are two icons. They are **Flip Horizontal** and **Flip Vertical**, and they flip the current **Sub View** image on either axis. The following is our **Sub View** image example, flipped vertically :

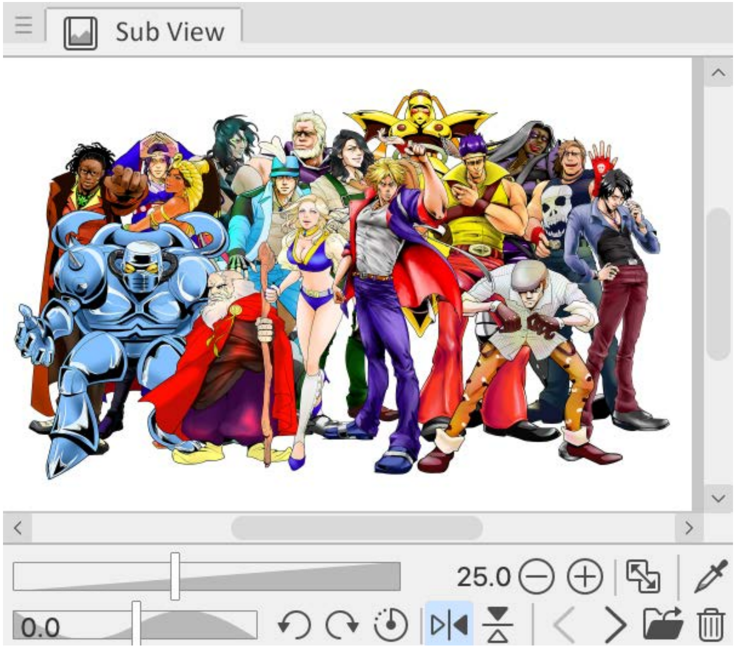


Figure 6.31 – Screenshot of the flipped Sub View image

As mentioned previously, color selection is also possible from **Sub View** images. To switch from the default hand tool used to interact with the loaded image to the color picker, click on the eyedropper icon located to the right of the **Fit to navigator** icon in the top row of icons. The eyedropper will now be active over the **Sub View** image. Clicking with the eyedropper will select the color from the image and make it the active foreground or background color, depending on which is selected in the toolbar.

In the next section, we will learn how to prepare a sketch for digital inking using the Layer Color setting that was briefly mentioned in the previous chapter. Read on to learn more.

Using Layer Color to prepare a sketch for inks

We're going to wrap up this chapter by learning about one way that Clip Studio Paint solves a common digital art problem. Those of you reading this book who have done digital art in the past might be familiar with the following scenario.

You get your sketch finalized and create a layer for your final inks. You ink for a bit and then realize that something in the sketch needs to be changed. You switch back to the sketch layer and make the correction, then continue inking. It isn't until you finish inking that you realize you never switched back to your ink layer, and now you have your inks on the same layer as the pencil sketch and must start over.

This is an extremely frustrating and common problem when working with digital layers. Thankfully, the makers of Clip Studio Paint have given us a feature that makes this a thing of the past. Sure, you could lock the sketch layer so that no changes can be made to it at all to prevent this, but then if a change needs to be made, you have to spend the time unlocking it before you can correct an error or adjust a detail. This seems minor, but locking and unlocking a layer takes precious time, and I am all about streamlining the workflow as much as possible!

Follow these steps to turn a sketch layer blue and begin inking over it on another layer:

1. Open a file with a sketch layer. If you don't have one, use the directions in *Chapter 5*, *Penciling: Layer and Layer Property Palettes*, to set up a file with layers, then make a sketch on the sketch layer.

2. Once we have our finished sketch layer and made sure it is the active layer in the **Layer** palette, we click on the **Layer Color** icon in the **Layer Property** palette. This will turn the entire contents of the selected layer into a blue color that is reminiscent of non-photo blue used in traditional pencil and paper art. In the following screenshot, the pencil layer has been turned blue:



Figure 6.32 – Screenshot of the sketch turned blue

3. To change the color of the layer, click on the blue rectangle that will now show in the **Layer Property** palette. This will bring up the color picker. You can select any color from the color picker to use as the layer color.

4. In the following screenshot, we can see that our colored layer is easy to discern in the list of layers because of the icon that shows above the layer's name. Look for this icon if you have lots of layers and need to find the one that has been colored:

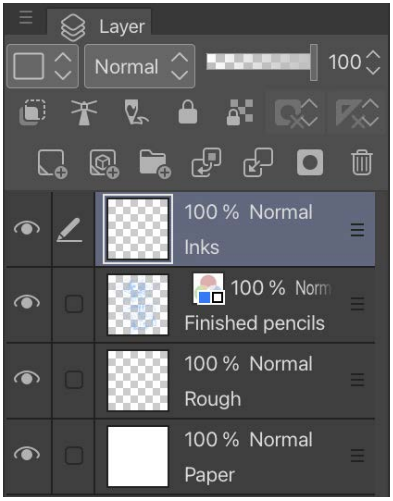


Figure 6.33 – Screenshot of the Layer palette

5. With the **Layer Color** option active, any new marks made on this layer will show up in the layer color. In the following screenshot, an inking pen tool has been used to make a mark on the sketch layer. Since it shows up as blue, we know that we are still on the pencil layer and not on the ink layer:

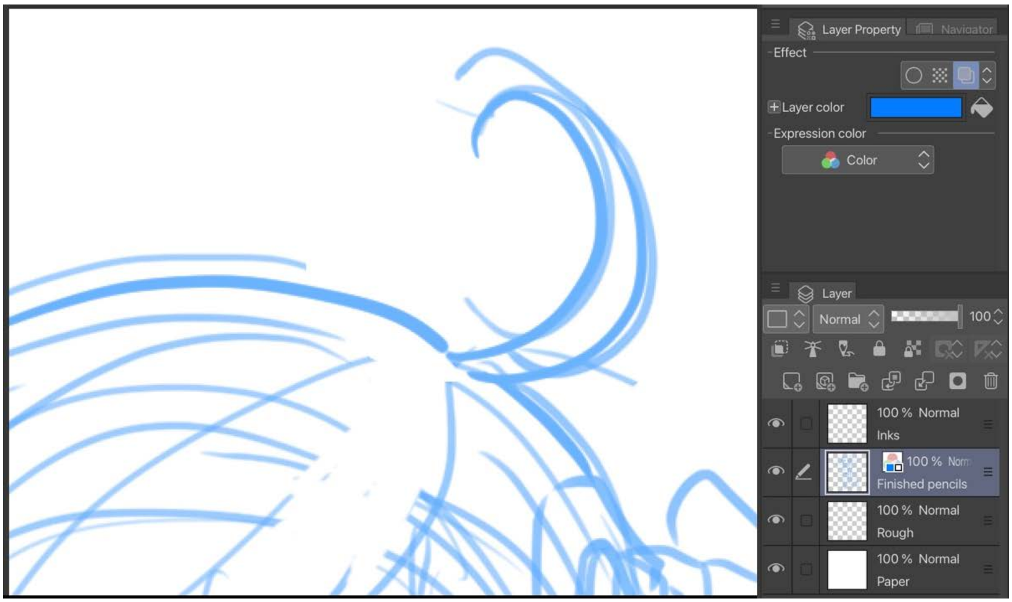


Figure 6.34 – Screenshot of inking on the sketch layer

6. Select the **Inks** layer in the **Layer** palette, above the **Finished pencils** layer, and begin inking. The ink lines will now show up in the currently selected color in the toolbar instead of using the layer color. In the following screenshot, the ink line shows as black because we are on the correct layer:

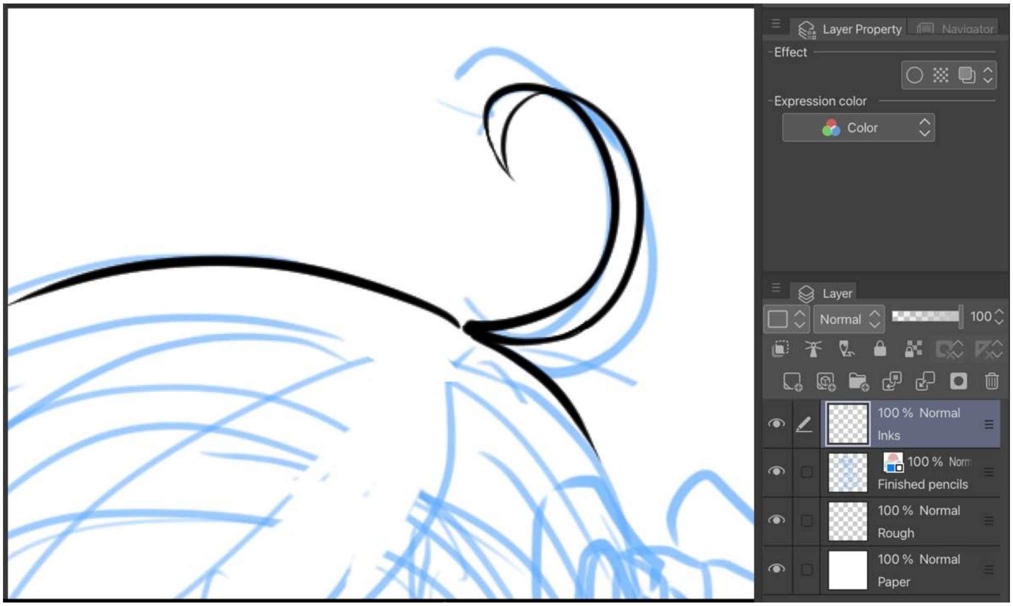


Figure 6.35 – Screenshot of inking on the Inks layer

This is such a simple solution to a common digital art problem, and a useful feature that I hope you'll incorporate into your own workflow!

Summary

In this chapter, we talked about eraser tools and using transparent color to turn any brush tool into an eraser. We talked about the different selection tools and how to make adjustments to a piece of art with them by using the Selection Command Bar. We also discussed the **Sub View** palette and how to use it to store various reference images. Finally, we learned about how the **Layer Color** feature can completely eliminate a common digital art problem.

In the next chapter, we are going to learn all about the ruler tools that make Clip Studio Paint a truly powerful piece of art software. Keep reading to learn more.

7
Using Text and Balloon Tools

Lettering for comics is a complex and nuanced topic that could take an entire book of its own. The rules and conventions for lettering a comic are varied, and lettering in and of itself is a skill that takes lots of time and practice to master. Back in the day before computers, a comic would have a dedicated letterer who would draw all of the dialog boxes, balloons, and words by hand using various tools. Thankfully, we can letter using Clip Studio Paint and the fonts installed on our computer rather than having to draw every letter on our own!

In this chapter, we are going to concentrate not on the theory and how-tos of lettering for comics specifically, but on how to use the text and balloon tools in Clip Studio Paint. Since Clip Studio is made for comic book artists, it has tools to make the creation of speech balloons easy, as well as tools to create different balloon tails and more.

The following topics will be covered in this chapter:

- Text tool basics
- Advanced text settings
- Creating custom text tools
- Making and editing speech balloons

- Connecting speech balloons
- Using speech balloon materials

Let's get started!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device and a new canvas should be opened, and preferably one character should already be drawn on it. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

Understanding the basics of the Text tool

In this section, we're going to get a basic look at how to use the text tools and the basic settings before building on the knowledge in the sections that follow. Let's add some text to a drawing using the following steps:

1. Open a blank canvas or a drawing to add some text to.
2. Choose the **Text** category of the tools from the toolbar.
3. Make sure that the **Text** subcategory is chosen in the **Sub Tool** palette.
4. Select the **Text** tool.
5. In the **Tool property** palette, select the desired font from the drop-down menu. This menu will populate with fonts that have been installed on your computer system.
6. Select the size of the font by using the slider or the up and down arrows.
7. The alignment of the text (left, center, or right) can be set in the justify section of the **Tool property** palette.
8. Set **Text Direction** to either horizontal or vertical.
9. Set **Text Color** using the options shown. **Text Color** can either be the currently selected main color, the currently selected sub color, or a user color.
10. Click on the canvas where you'd like to place the text and type out your desired dialog or words.

The following screenshot shows a panel from my comic *Go! Go! Metro Lines!* with the dialog text added:

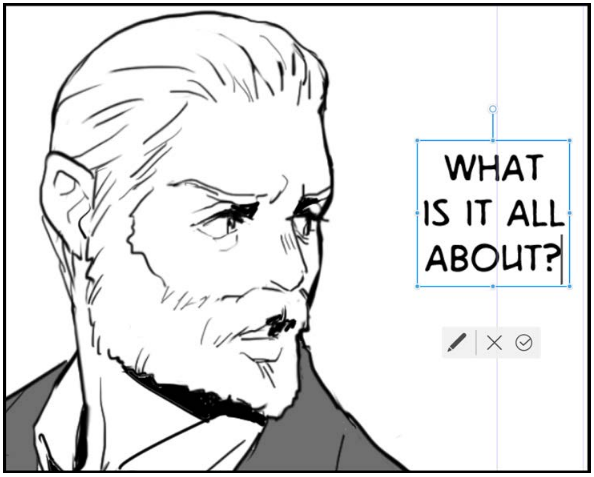


Figure 7.1 – Screenshot of a comic panel with text

The text in the preceding screenshot is center justified and set at a size of 9.0 points. Depending on the font you are using, as well as your style of writing and art, a larger or smaller size may be more appropriate for you. Keep readability in mind, though, as you don't want to make your words so small that they are illegible! If you are posting your comic to the internet and also printing it, make sure to test that your text is legible in both formats. Sometimes, text that is legible in print can become illegible on the internet.

Tip

Once your text is typed out, you can resize it on the fly by using the control boxes around the text. In the preceding screenshot, they are the circular and rectangular handles around the outside of the box surrounding the text. Clicking and dragging on one of these boxes will make the text inside larger or smaller.

Those are the basic controls for making words in Clip Studio Paint. In the next section, we will take a deeper look at the text settings in order to make finer adjustments to things such as line and character spacing.

Exploring advanced text settings

In some cases, you may need to adjust parts of the font that you are using. Whether that is the spacing between individual characters or the spacing between lines of text, Clip Studio Paint gives you the options to fine-tune your fonts to perfection. Let's look at these settings now. To access the settings, open the **Sub Tool Detail** palette from the **Tool property** palette in the user interface.

Font settings

The left-hand side of the **Sub Tool Detail** palette contains categories of options. In this section, we will take a look at the first category, the **Font** category. This category contains options for the font and size of characters, word and character spacing, and the style of the font.

The following screenshot shows this category of font options:

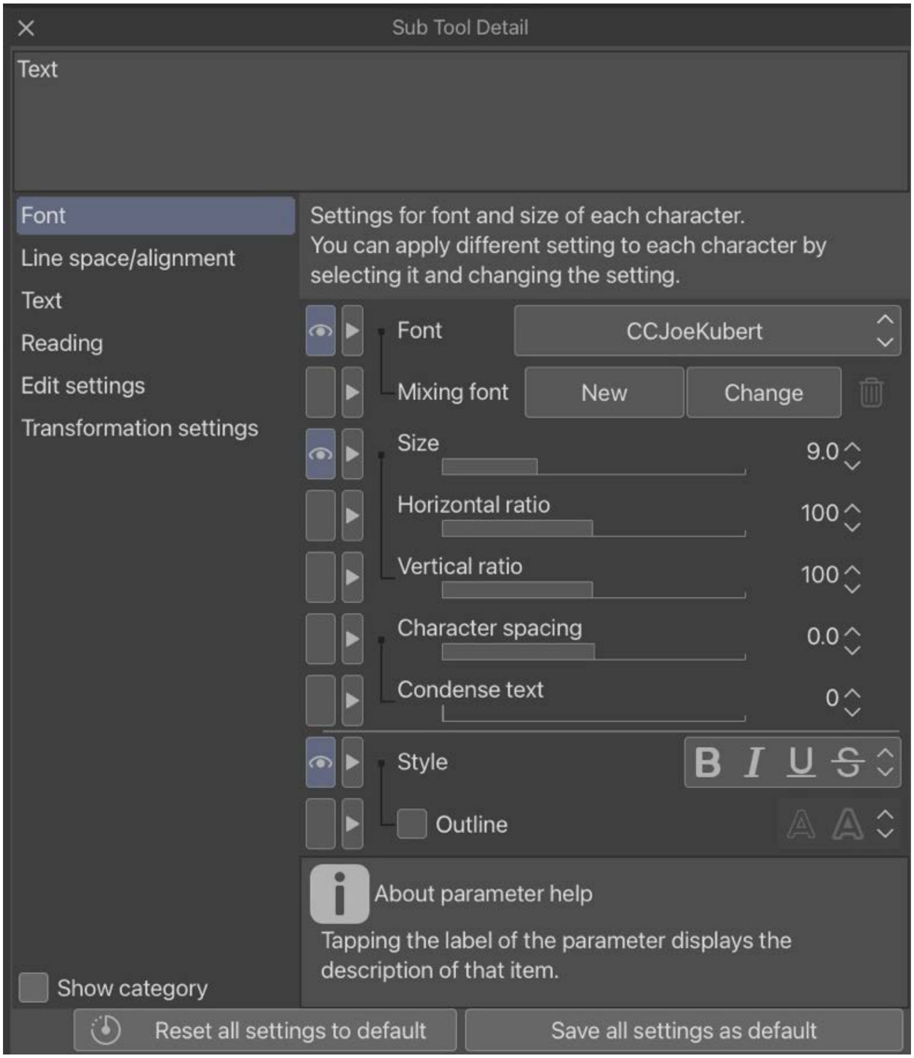


Figure 7.2 – Screenshot of Font options in the Text tool's Sub Tool Detail palette

The following list describes each of the preceding options:

- **Font**: This drop-down menu lists the currently selected font. This list is populated with fonts that have been installed on your computer's operating system.
- **Mixing font**: This option is used mainly when mixing Japanese and Chinese characters with English characters, so we will not be using it in this book.
- **Size**: Set the size of the font.
- **Horizontal ratio**: This option sets the horizontal spread of the letters, making them wider or thinner.
- **Vertical ratio**: Use this option to control the vertical ratio of the font, making the letters taller or shorter.
- **Character spacing**: Adjusts the spacing between the letters of the font.
- **Condense text**: Specifies the ratio of the gap on either side of each character.
- **Style**: This option allows you to set the font to the bold, italic, underline, or strikethrough font styles.
- **Outline**: Turns the font into an outline-only font, where the letters are not filled in with a solid color.

Line space/alignment settings

The second category of options in the **Sub Tool Detail** palette is **Line space/alignment**, which gives you control over editing lines. This category of options is shown in the following screenshot:

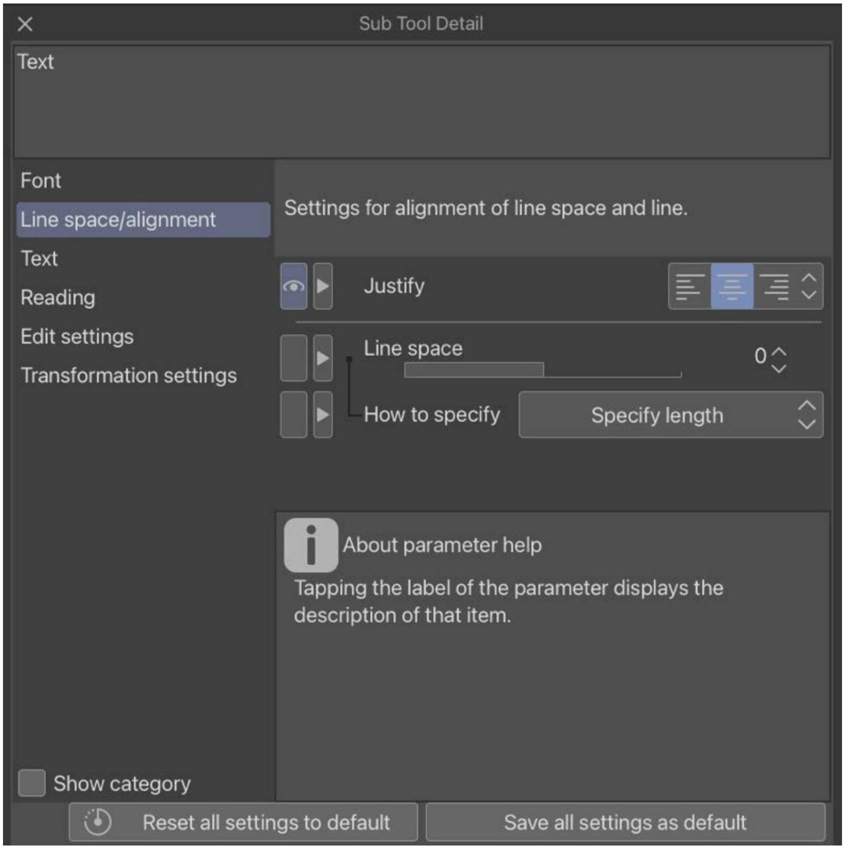


Figure 7.3 – Screenshot of the line spacing options in the Text tool's Sub Tool Detail palette

These settings are described in the following bulleted list:

- **Justify**: Set the alignment of lines of text to **Left**, **Center**, or **Right**.
- **Line space**: Adjust the spacing between lines of text.
- **How to specify**: This drop-down menu controls how to specify the **Line space** option. It can be set to either **Specify length** or **By percentage**.

Now you know how to edit lines. Next, we are going to explore more detailed settings of text appearances.

Text settings

In this section, we are looking into the **Text** category, which grants us control over even more detailed settings, such as text directions and background colors. The following screenshot shows the **Text** category of the **Sub Tool Detail** palette:

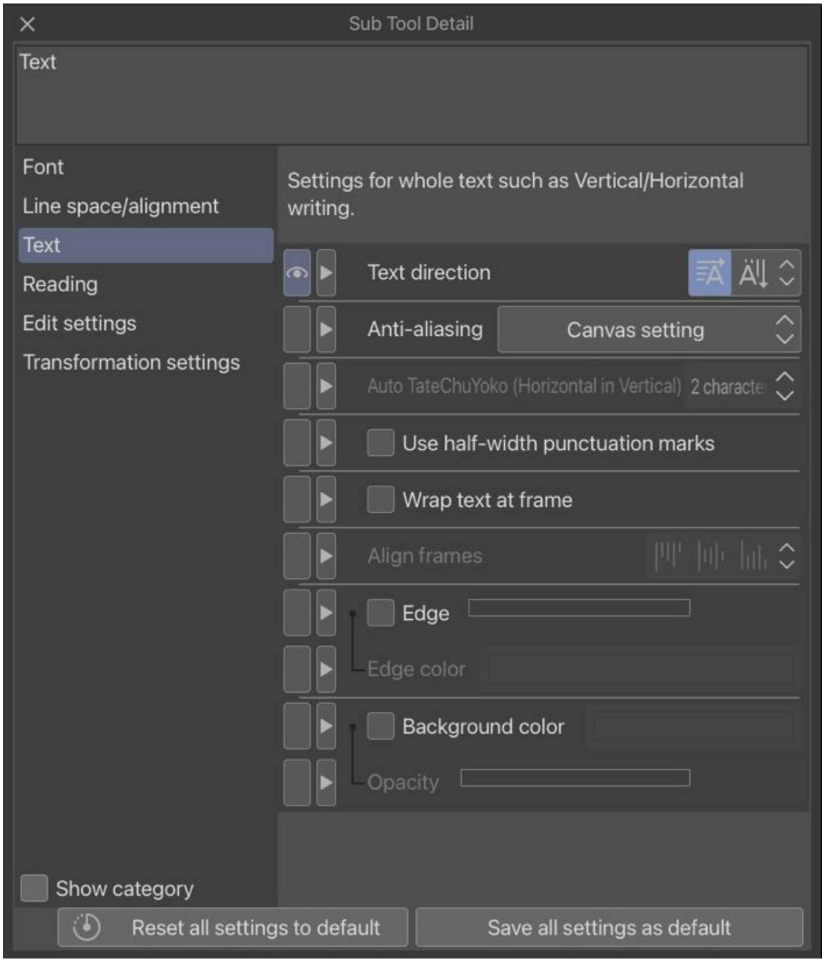


Figure 7.4 – Screenshot of the Text options in the Text tool's Sub Tool Detail palette

Each of the **Text** settings is described in the following list:

- **Text direction**: Sets the text direction to either horizontal or vertical.
- **Anti-aliasing**: Sets the anti-aliasing used for text. The options are **Canvas setting**, **On**, and **Off**.
- **Use half-width punctuation marks**: Having this checkbox selected uses punctuation marks that are half the width of the normal size, which is only effective in languages that use two-byte characters, such as Japanese.
- **Wrap text at frame**: This checkbox, when checked, will cause the text to automatically change line breaks when it gets to the end of the current line of text. If checked before the text entry begins, Clip Studio Paint will automatically create a small bounding box around the text to act as the text box. If it is checked after the typing has begun, the program will use the length of the current line of text to determine the size of the text box. The control handles text around the edge of the bounding box that will not be displayed while the **Wrap text at frame** option is activated.
- **Align frames**: When the **Wrap text at frame option** is used, this option becomes active as well. It allows the user to set the lines of text in the text box to align to the top, center, or bottom of the text entry area.
- **Edge**: Adds an outline around the selected text. The thickness of the outline can be controlled using the slider that is activated after the checkbox is clicked.
- **Edge color**: Allows the user to select the color of the edge outline. Click on the rectangle to the right of the option name to select the color.
- **Background color**: Sets a background color for around the text.
- **Opacity**: Controls the opacity of the background color.

We will now move on to the next settings, which are specifically made for Japanese comics. So, feel free to skip them if you don't use Japanese text.

Reading settings

These settings are only applicable for Japanese language users. Reading settings control how to display reading text, which is normally accompanied by Japanese Kanji characters to tell the reader how to read some Kanji characters phonetically.

The following screenshot shows the **Reading** category of the Text settings:

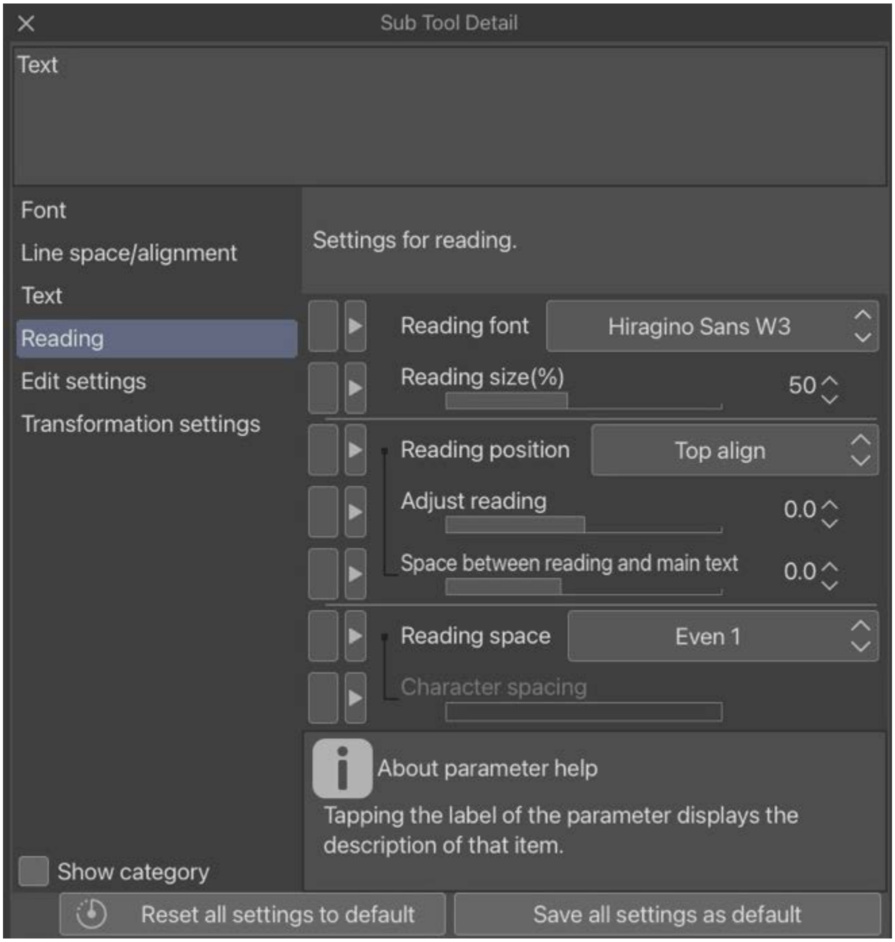


Figure 7.5 – Screenshot of the Reading options in the Text tool's Sub Tool Detail palette

These settings are used mainly for comics in Japanese so that you can add reading text to characters in Japanese dialog bubbles. Selecting a string of Japanese characters and then using the **Reading** settings allows the user to set a font for displaying reading characters next to the selected text automatically.

In the next section, we will look at **Edit settings**, which decides the text color and which layer to add text to.

Edit settings

In this section, we are looking at the settings of text color and which layer to add text to. The following screenshot shows the **Edit settings** category of the Text options:

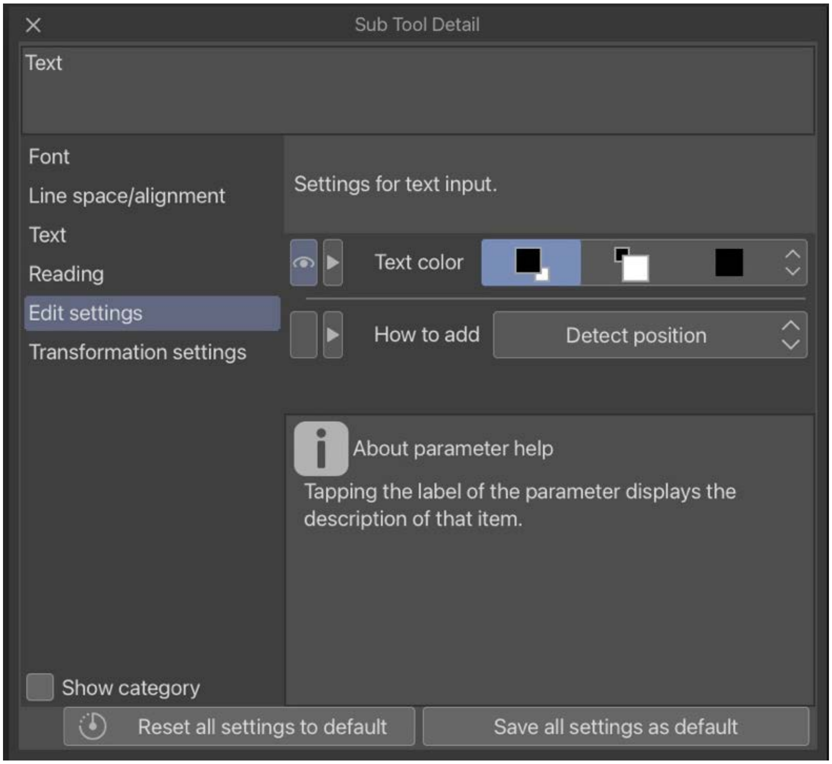


Figure 7.6 – Screenshot of the Edit settings options in the Text tool's Sub Tool Detail palette

The following is a list explaining these options:

- **Text color**: Controls the text color by setting it to either the main color, sub color, or user color. The user color can be selected by clicking on the user color icon and then selecting the color with the color picker.
- **How to add**: This drop-down menu controls how Clip Studio Paint inserts text, such as adding to the current layer or always creating a new layer.

Now that we're familiar with all the different options available to edit and fine-tune our text, let's create a custom text tool preset to save these settings for a specific comic project.

> **Tip**
>
> Do you find yourself opening the **Sub Tool Detail** window often to get to a setting? The **Sub Tool Detail** settings for any tool can be added to the **Tool property** palette in the interface by clicking on the rectangle to the left of the setting name. Settings with an eye icon next to them will be shown in the **Tool property** palette, making them easily accessible!

Wow, that was quite a lot to take in—the many, many text settings, such as alignment, line space, and text color! But they allow you the freedom to control how your text appears on your comic; you can also change them depending on the scenes, tones, and mood of your comics. How about having a fixed setting that is made by you, so you can use it all throughout your comic without re-setting each time?! Let's make that possible by reading the next section.

Creating custom text tools

For some projects, you may need to use the same set of text settings many times. Making a comic is just one example of when you may want to make a text tool that saves your font, font size, justification, and other settings so that you don't have to set them over and over again!

Creating a custom text tool is easy. Follow these steps to make a saved text tool:

1. Select the **Text** sub tool.
2. At the bottom right of the **Sub Tool** palette, click on the icon for **Create copy of currently selected sub tool**.
3. The **Duplicate sub tool** window will appear. It is shown in the following screenshot:

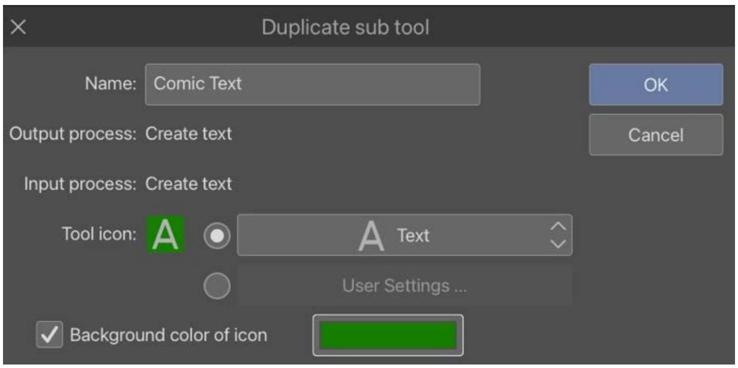


Figure 7.7 – Screenshot of the Duplicate sub tool

4. Enter a name for your new text tool in the **Name** text entry box.
5. Select a tool icon, if desired.
6. Click on the checkbox for **Background color of icon** and select a color to display around the icon when this sub tool is selected.
7. Click on **OK** to create the new sub tool.
8. Using the text settings and advanced settings, make changes to the new text tool to set the font, font size, and any other options to make the text look as desired.

Now, whenever you need text with these settings, you can select your custom text tool preset and get right to typing!

Making and editing speech balloons

Since Clip Studio Paint is made primarily for creating comics, there are tools included for creating speech balloons easily in the program. With just a few clicks, we can make speech balloons and tails that can be edited like vector objects.

Follow these steps to create a speech balloon and a tail:

1. Add some text to your canvas using the directions that we gave in the first section of this chapter.
2. The **Balloon** tools are in the same category of tools as the **Text** tool. They are shown in the following screenshot:



Figure 7.8 – Screenshot of the Balloon sub tool

3. Select the desired balloon tool. For this set of instructions, we will be using the **Ellipse balloon** tool.
4. With the text layer selected, click with the **Ellipse balloon** tool and drag it to make a balloon surrounding the text. Don't worry about making it perfect—we will adjust the position in the next step.
5. With the **Operation | Object** tool, click on the previously created balloon. Clicking directly on the balloon with this tool will reveal the individual control points and allow them to be manipulated like the vector points. If you want to know more, go to *Chapter 10*, *Vector Layers and the Material Palette*. Use the handles around the outside of the bounding box to resize the balloon as needed, as shown in the following screenshot:

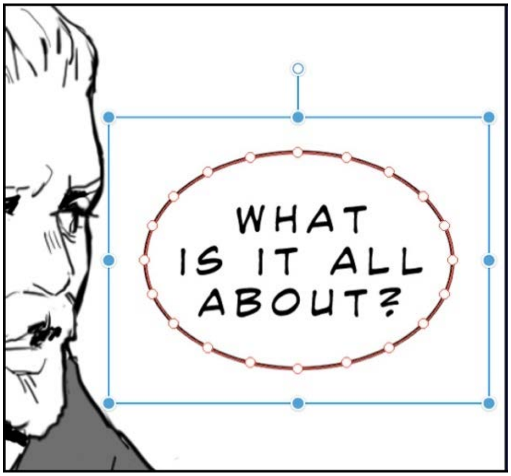


Figure 7.9 – Screenshot of an Ellipse balloon example

6. To reposition the text inside of the balloon, use the **Object** tool to click on the text to reveal the text bounding box. Clicking and dragging on the text within the box will reposition the text, and the outside handles can be used to resize the text.
7. To create the balloon tail, select the **Balloon tail** sub tool from the **Text** category.
8. In the **Tool property** palette, select the desired option from the **How to bend** drop-down menu. In this example, we will be using the **Spline** option.

9. Click inside of the speech balloon to start the tail. When using the **Spline** option, click for a second time on the point where the balloon tail should curve. Continue clicking to place curve points until the desired length of the tail has been reached, and then double-click to end the tail. You can see the perfect tail in the following screenshot:

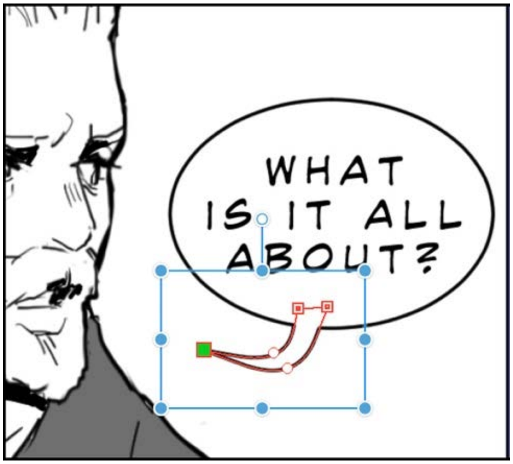


Figure 7.10– Screenshot of a balloon with a tail

The Object tool can be used to edit the look of the balloon tail as well as the balloon. The preceding instructions show us how to make a simple balloon and tail. Let's take a few minutes now to look at the **Tool property** options for the **Ellipse balloon** tool before we discuss the other balloon tools.

The Ellipse balloon tool

The following screenshot shows the **Tool property** palette for the **Ellipse balloon** tool, which is the most generic and easy balloon to create. In Clip Studio Paint, you can decide how speech balloons appear, such as their color, shape, and which layer to add to. Let's look at how to adjust the balloon's appearance into your desired one:

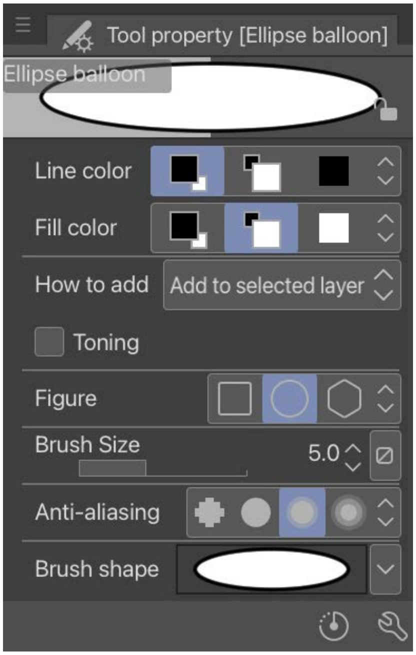


Figure 7.11 – Screenshot of the Ellipse balloon tool's Tool property palette

The following list describes each of the options shown in the **Tool property** window:

- **Line color**: The color of the outline around the edge of the balloon.
- **Fill color**: Sets the color of the inside of the speech balloon.
- **How to add**: Controls how the balloon will be added to the image. The options are **Create new layer** and **Add to selected layer**.
- **Toning**: Creates the balloon by using a dot tone effect.
- **Figure**: Sets the shape of the balloon. A rectangle, ellipse, or polygon can be created.
- **Brush size**: Controls the thickness of the outline.
- **Anti-aliasing**: Sets the anti-aliasing level for the outline of the created balloon.
- **Brush shape**: This dropdown allows a variety of effects to be applied to the outline of the balloon. In addition to settings such as pencil, airbrush, and spray, watercolor edge effect designs such as wavy, heart, dashed lines, and dotted lines can be applied to the outline.

Isn't it easy and simple enough to create your own preferred balloon? We will look at how to edit balloon tails, which is even simpler to do, in the following section!

The Balloon tail tool

In a comic, especially when there are multiple characters in the same panel, we need to indicate which dialog is coming from which character to avoid confusion. So, it is necessary to have an accurate balloon tail for each dialog. Let's look into what the balloon tail options are.

The following screenshot shows the options for the **Balloon tail** tool:

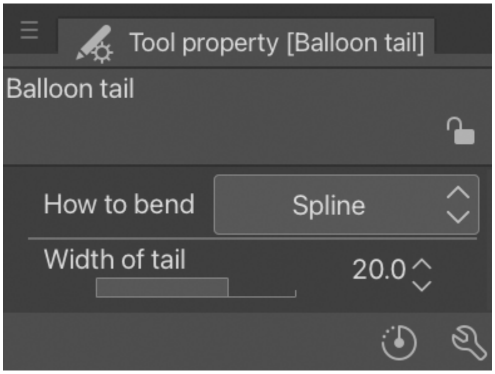


Figure 7.12 – Screenshot of the Balloon tail tool's Tool property palette

The following list describes each of the options for the **Balloon tail** tool:

- **How to bend**: Sets the type of tail to be created. These are **Straight line**, **Polyline**, and **Spline**.
- **Width of tail**: Controls the width of the tail at the starting point.

Great, now you know how to set the balloon tail options! Let's move on to different shape balloons, which come in handy when you need more than ellipse-shaped balloons.

The Curve balloon tool

The Curve balloon tool is another way to create speech balloons with more freedom for shaping balloons. The following screenshot shows the options for this tool:

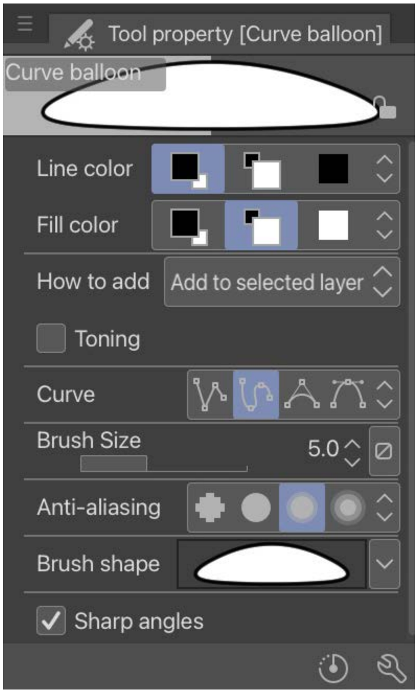


Figure 7.13 – Screenshot of the Curve balloon tool's Tool property palette

Many of these options are the same as the Ellipse balloon tool. The following list explains the options that are unique to this tool:

- **Curve**: Controls how to make the curves of the balloon. For a detailed description of each of the curve options, see the *Curve ruler* section in *Chapter 13*, *All About Rulers*.
- **Sharp angles**: Changes corners from smooth curves to hard corners.

So, it doesn't have to be round all the time! Let's look at even more different shapes of balloons in the next section.

The Balloon pen tool

The Balloon pen tool allows us to create speech balloons by drawing them freehand. The following screenshot shows the **Tool property** options for this tool:

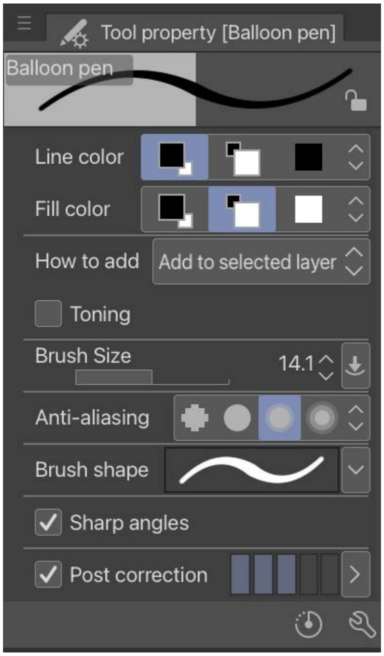


Figure 7.14 – Screenshot of the Balloon pen tool's Tool property palette

The following is a description of the only option for this tool that was not described in the *Ellipse balloon tool* section; for the rest of the options, refer to the *Ellipse balloon tool* section:

- **Post correction**: When this option is checked, the program will smooth out lines after they are drawn. The amount of correction is based on the value selected in the bar to the right of the option name.

You have now mastery over speech balloons; using the options we have learned, you can add balloons, change their shape and color, edit their tails, and even draw freehand-shape balloons!

How about having more than one dialog in one panel? You can also connect them if they are coming from the same character! Isn't that fun?!

We will discuss how to do this in the next section!

Implementing connected speech balloons

In this section, we are going to learn how to implement connected speech balloons. Connected speech balloons are used when you have dialog in multiple speech balloons that are connected together with balloon tails, as shown in the following screenshot:



Figure 7.15 – Screenshot of connected balloons

This style of speech balloon is easy to do in Clip Studio Paint, but it does require a bit of forethought. Setting up connected speech balloons actually occurs during the text tool phase of making the speech balloons. Follow these steps to create connected speech balloons:

1. Type in the text for the first speech balloon by using the Text tool. Click on the check-circle icon below the text entry to commit the text. This icon is shown in the following screenshot:

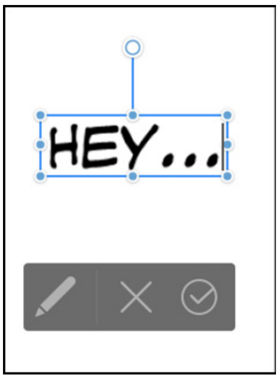


Figure 7.16 – Screenshot of the text typing command bar

2. With the Text tool selected, move the cursor close to the box surrounding the first text you entered. A + icon will appear next to the cursor when you are in the correct spot to make a connecting text box. Click and enter the text for the second balloon.
3. Click on the checked-circle icon once the second area of text is entered.
   A box will appear around any text areas that are connected, as shown in the following screenshot:

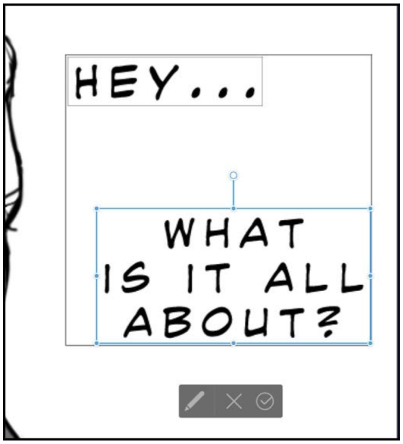


Figure 7.17 – Screenshot of two different texts on the same layer

4. Create a balloon around each section of text, using the instructions in the *Making and editing speech balloons* section of this chapter.
5. Select the **Balloon tail** tool and drag a tail from the first balloon to the second, as shown in the following screenshot:

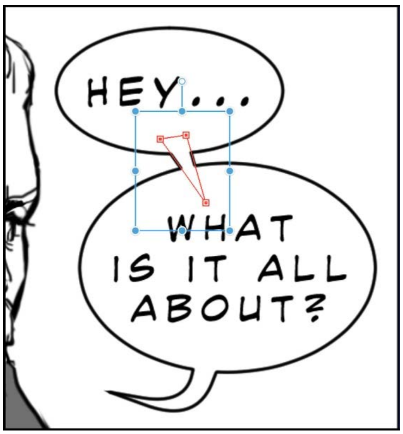


Figure 7.18 – Screenshot of a tail connecting speech balloons

6. Once the tail is created, it will automatically connect the two balloons, as shown in the following screenshot:



Figure 7.19 – Screenshot of connected speech balloons

Wow, the two dialogs are connected! Comic readers would perfectly understand that both balloons are coming from the same character!

Now you have learned how to handle multiple balloons in one panel, so you won't panic when there are multiple dialogs. You can just type the following dialogs by pressing the + icon under the first dialog, create balloons, and then connect them with tails.

In the next section, we are going to learn how to use ready-made special balloons. You might find one that is really suitable for your comic or manga creation.

Using speech balloon materials

In addition to having the speech balloon sub tools at your disposal, Clip Studio Paint also has a library of speech balloon materials for special dialog, emotional moments, and almost anything else you can imagine.

We will cover materials in more depth in *Chapter 10, Vector Layers and the Material Palette*, but let's take a look at the specific speech balloons in the Material palette now. This section of the Material palette is shown in the following screenshot:

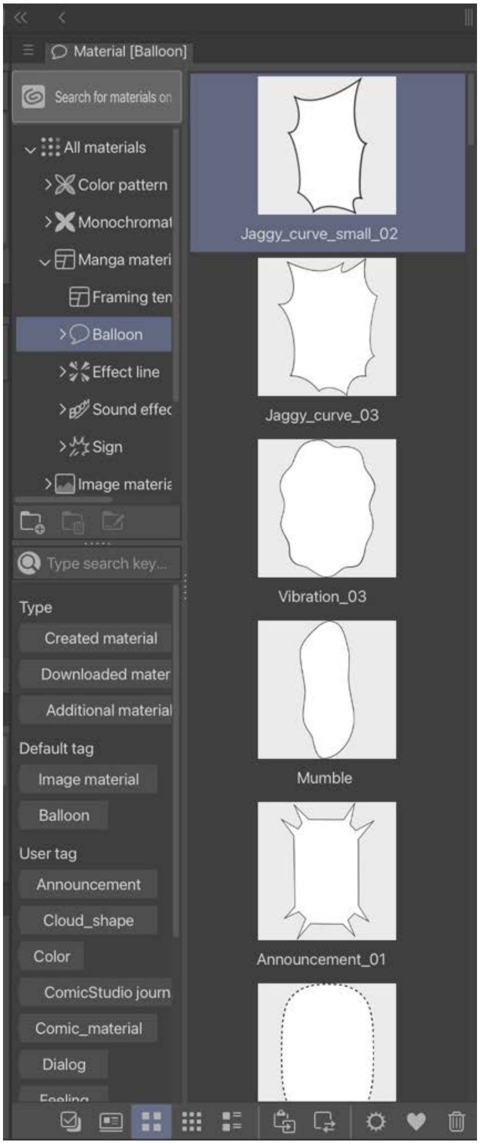


Figure 7.20 – Screenshot of speech balloon materials

Balloon materials are located in the **Manga materials** category of the library. There are three subcategories of balloons, as detailed in the following list:

- **Dialog**: Dialog balloons include balloons for shouting, mumbling, announcements, whispering, thought clouds, and more.
- **Feeling**: Feeling balloons are more specialized, with color borders of flowers, stars, and more.
- **Narration**: The Narration category contains various rectangle balloons perfect for narration in comics.

Note that some of these materials may need to be downloaded from the Clip Studio Assets before use. For more information, please refer to *Chapter 18*, *Exploring the Clip Studio Assets and Animation*.

To use a speech balloon material, select the material to highlight it, and then click on the **Paste selected material to canvas** icon at the bottom of the Material palette. The icon looks as in the following screenshot:

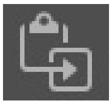


Figure 7.21 – Screenshot of the Paste selected material to canvas icon

Speech balloon materials will not automatically attach themselves to text that is present in the image, so the material may need to be repositioned and resized to fit the text.

Summary

In this chapter, we learned about how to use the Text tool and the settings for editing and fine-tuning text. We learned how to create a custom text tool to save text settings for our comic projects. Then, we learned how to create speech balloons with tails, how to connect speech balloons, and about the speech balloon materials.

These skills are great to have, for not only lettering and drawing speech balloons faster and more accurately, but also so you can have your own unique look of dialogs. Text in comics and manga is indeed part of your creation and is as important as your art in telling a story.

In the next chapter, we will learn about some techniques for inking the art while also looking at the many available inking tools.

8
Getting Started with Inking Tools

Back in the early days of comics, pencil lines were too light to be picked up by the cameras used to replicate comic art. So, artists used a brush or pen and black ink to redraw over the pencil lines and make them dark enough for the cameras to pick up. Inking has become an art in and of itself. Clip Studio Paint has some of the best inking tools in the digital art world, packaged with it when you purchase the software. There are also a multitude of third-party tools available either for free or to purchase that provide specialty inking functionalities that give different looks and feels to inked lines.

We are going to start with a step-by-step inking process in the first section, so don't worry if you don't know much about digital inking! You will also see many of the inking tools Clip Studio Paint offers, then we will find out how to customize them in a later section of this chapter. We will also find out how to use inking tools on vector layers. Finally, we will end the chapter by learning how to modify a pencil layer to have a finished look. You will learn various other ways to ink at the end, too!

In this chapter, we are going to talk about the following topics:

- Principles of inking
- Inking tools
- Inking on Vector Layers
- Modifying the Pencil Layer to simulate ink

Let's get started!

Principles of inking

Inking in the world of non-digital tools is the process of using pens or brushes and black India ink to finalize pencil lines and make them ready for toning or coloring. The printing presses back in the early days of comics weren't capable of printing grayscale, so dark black ink lines were needed to reproduce the comic art.

In the digital world, we aren't restricted to simply black ink for our lines, and we have a multitude of tools we can use to make our finalized lines. There is an art to good inking that we should discuss briefly.

Inking is the art of taking a rough pencil sketch and providing finalized edges, volume, and a sense of light and shadow. To see this process in action, let's take a look at an inking from sketch to final shades and examine how the inked lines accentuate the mood of the piece.

The following screenshot shows characters in their finalized pencil forms (note that the finalized pencil lines have been turned blue using the **Layer Color** settings, and we have decreased the **Opacity** setting of the sketch layer to 30% to make inking easier):

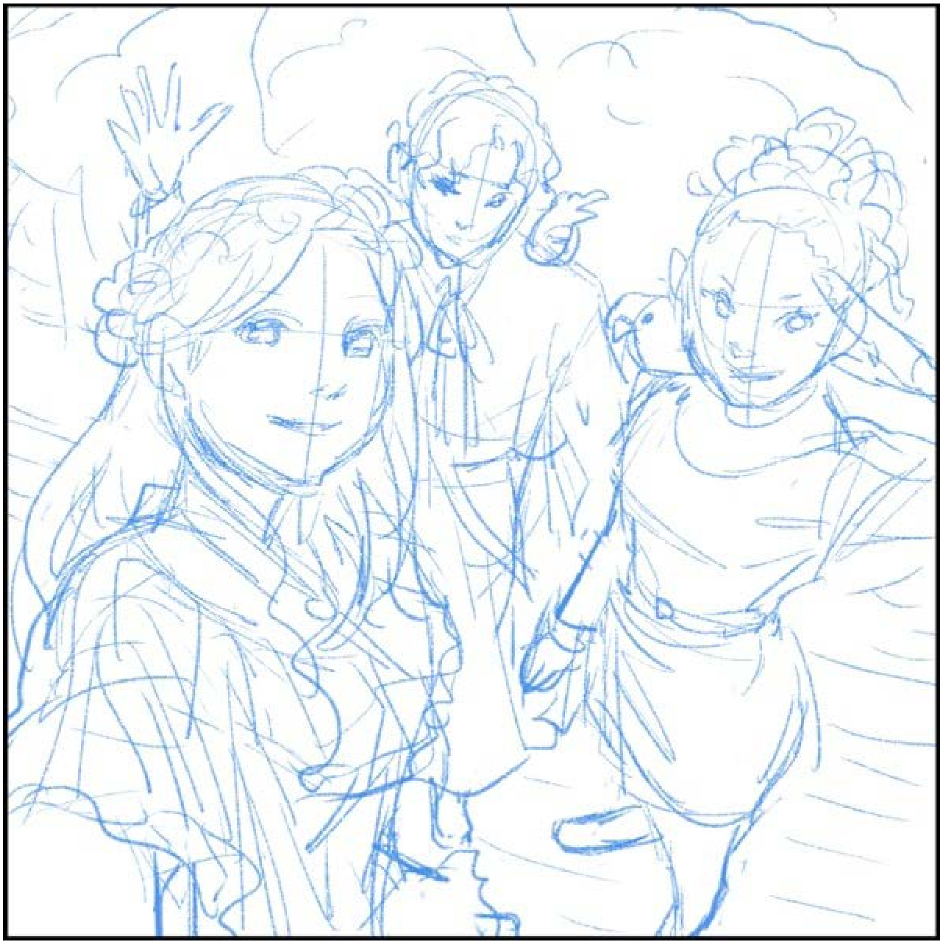


Figure 8.1 – Screenshot of a pencil sketch

As you can see, my sketch is quite rough at this stage. But it's OK for now, because I am going to finalize the lines with ink.

When you ink the image, the most orthodox way to do this is using **G-pen**, which is popular due to it having a higher touch and tilt sensitivity setting for outlines of characters, and the mapping pen, which is great for drawing very fine lines over content, as well as detailing.

Higher touch and tilt sensitivity means the line width changes from fine to bold depending on how much pressure you put or tilt on your pen. This can be seen in the following screenshot of a pen pressure setting and a corresponding line sample. To change **Pen pressure** and **Tilt** inputs, you can find the options by clicking the button to the right of the **Brush Size** setting:

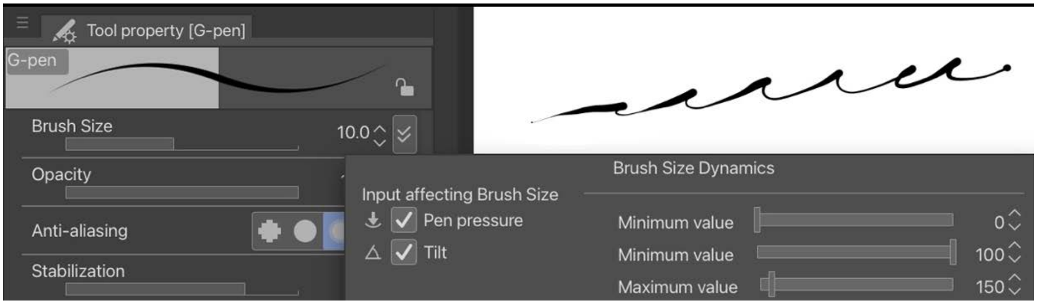


Figure 8.2 – Screenshot of high pen pressure setting and line

The following screenshot shows an inactive pressure and tilt sensitivity setting, which means the pen's width doesn't change no matter how much pressure you put on it or how much you tilt your pen:

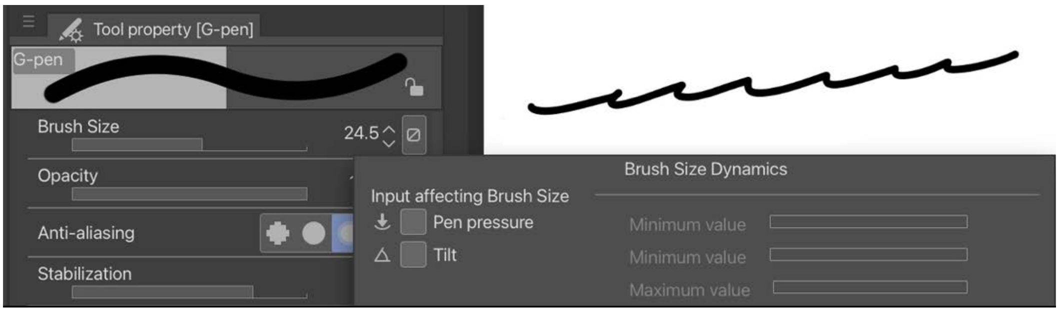


Figure 8.3 – Screenshot of low pen pressure setting and line

We can explore more of the pen settings in the *Customizing pressure sensitivity settings* section later in this chapter.

Drawing with great control of line width gives the image a crafty and soft look, especially when you draw things such as human skin, hair, and fluffy dress garments—these would be perfect to create with a higher touch- and tilt-sensitive G-pen!

A mapping pen has less touch and tilt sensitivity, but I assure you that using it as the tiny brush setting and going around details of hair, eyes, and clothing will give you a perfect and accurate look for the contents of your drawing.

The following screenshot shows the first stage of inking using a G-pen and mapping pen:

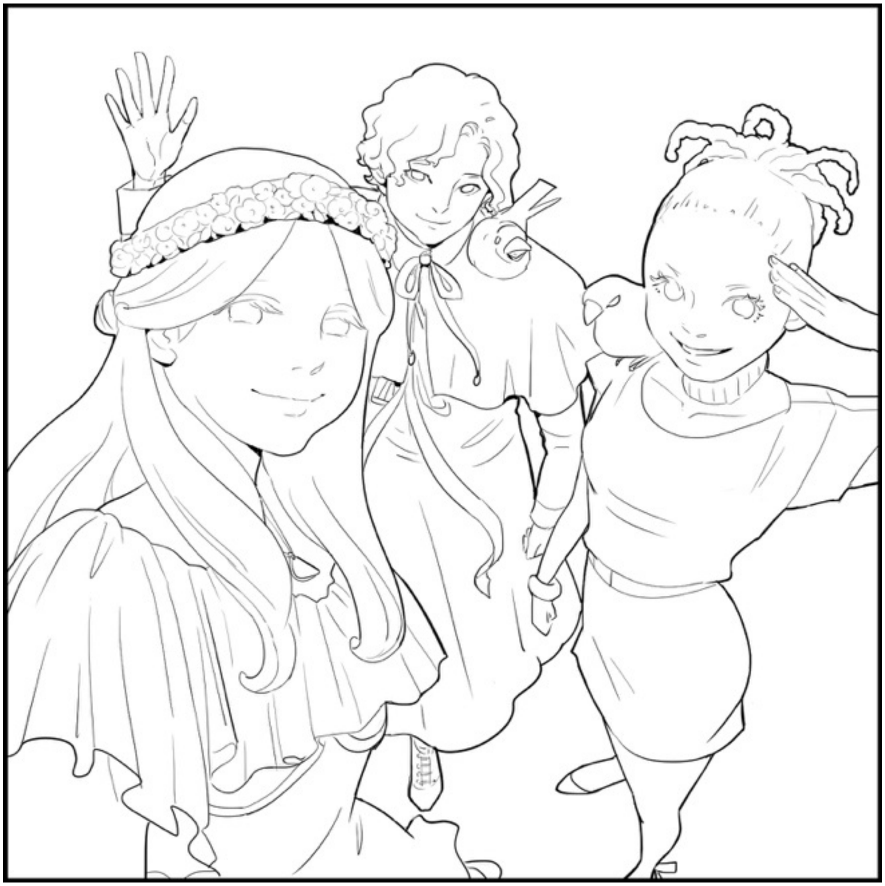


Figure 8.4 – Screenshot of the first inking stage

There are two things you might notice:

- The first thing is the line thickness; the outlines of characters are drawn with thicker G-pen lines to make the characters stand out from the background, and details are added with thinner mapping pen lines. If all the lines were in the same thickness, readers of the manga would have trouble finding where to focus.
- The second thing is that there is already shade in this line drawing. Please have a look under the characters' faces, and under the flower crown, the black section that is filled with ink depicts shade. This is a trick to create a three-dimensional effect on a simple black and white line drawing.

We can add more shade and dark color expressions on the next stage as in the following screenshot:



Figure 8.5 – Second inking stage

Boom! The character on the right has got dark hair, the middle character has dark but shiny hair, and the left character has light-colored hair. You can express dark hair by drawing around the sections with any pen tool, filling the sections with the **Fill** tool, and leaving a small section untouched for a shiny hair effect.

Not only hair but if you look at their eyes, the eye color is also depicted in a different shade. The character on the left has a lighter eye color, so the eyes are not filled with black ink like the others. What happens if we have a background too? See the following screenshot:

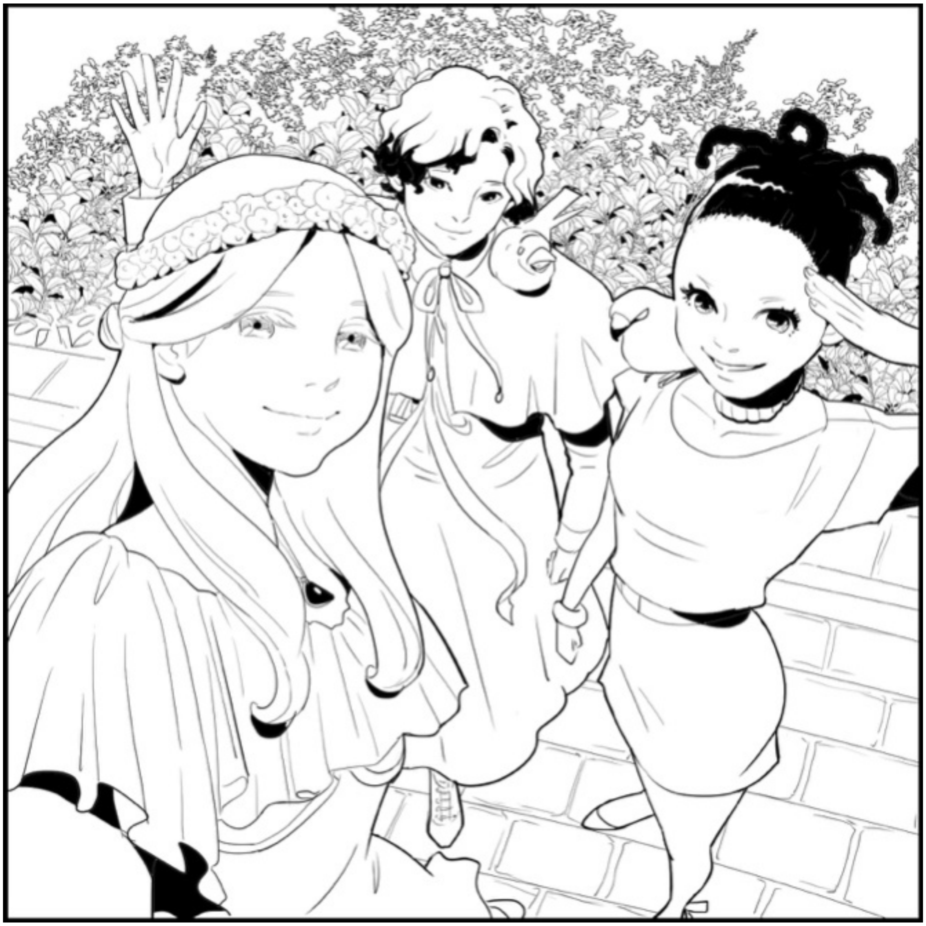


Figure 8.6 – Screenshot of the background inking stage

The trees, leaves, and floor tiles are added to the drawing! The background image was drawn in thinner lines with a mapping pen compared to the character outlines, because the nature in the background is further away from the camera and less important in this image.

But wait a minute… this image is visually too busy! You will need space between characters or objects and the background.

First, we will add a new layer between the layer that contains the characters and the layer with a background. Then, we use white to draw space around the character figures with brush tools. In this way, you can emphasize where to focus, as seen in the following screenshot:

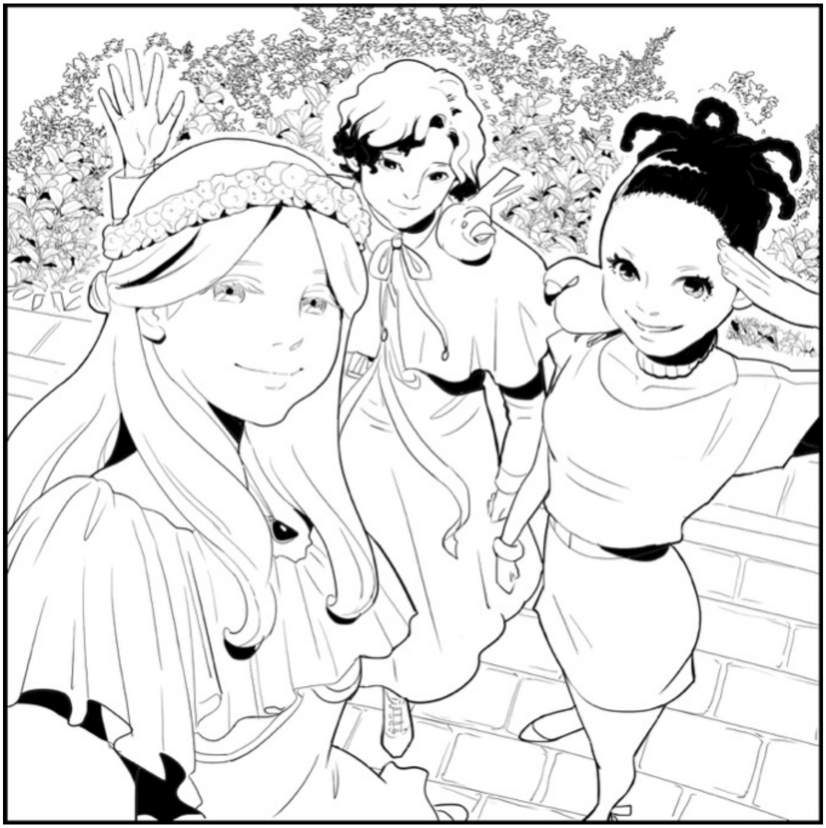


Figure 8.7 – Screenshot of the background with the extra inking stage

This is just a tiny change, but it makes a big difference to guide readers' eyes to desirable objects in the drawing.

One last thing to add is a puddle of black shade underneath the characters to make them really stand out, as in the following screenshot:

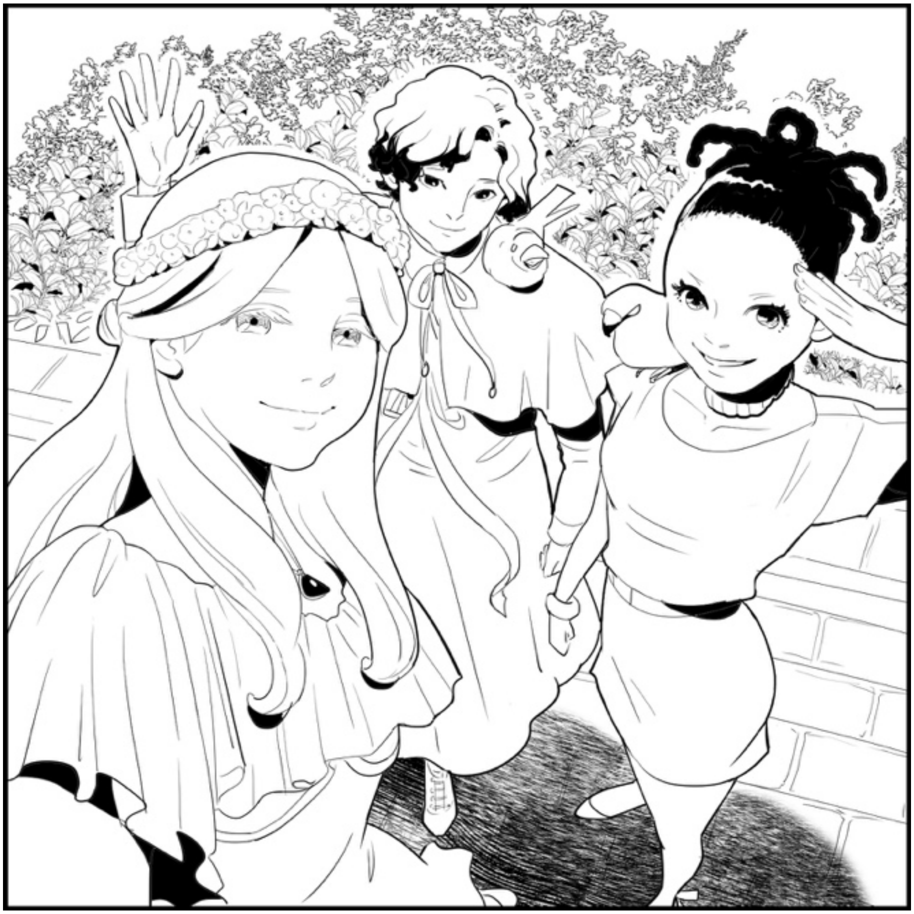


Figure 8.8 – Screenshot of the last inking stage

By adding the darker shade underneath, we can see the characters clearly now.

Of course, there are lots of ways to do inking. Many inkers use spot blacks to indicate deep shadows. Feathering, hatching, and cross-hatching can be used to add shading, detail, and texture. There are even styles of art that use ink with no line weight, a style called *ligne claire*, or clear line. Inking is as individual as each artist's style and if you're new to it, it may take a while to develop your own style. The key is to keep practicing!

Now that we know some of the principles of inking, how to change an expression color of the pencil layer, how to use thin and thick lines, how to add shade, and finally how to draw a background, let's explore some of the inking tools in Clip Studio Paint in the next section.

Exploring inking tools

Clip Studio Paint has a variety of tools for inking, and thanks to the customizable brush engine, we can also modify tools in order to better suit our needs. For the experienced inker, there are tools that mimic traditional inking tools, such as the G-pen, turnip pen, calligraphy pen, and textured pen. There are also a variety of marker tools that can be used for inking as well.

This is all well and good for the inker who uses pens, but what about the traditional inker moving into digital who uses a brush? The G-pen default tool is pretty good as a substitute for a real brush and ink experience because of its pressure sensitivity settings, as I mentioned in the previous section.

I get a lot of people asking what inking tools I use. Personally, I use several inking tools from third-party designers that I love! You can download ready-made pens created by other Clip Studio Paint artists, some of which are priced. You can check out *Chapter 18*, *Exploring the Clip Studio Assets and Animation*, to get to know more about these ready-made materials and how to download them.

But if you don't want to pay for a tool, you can always make one that suits your needs and style! The "right-feeling" tool will vary for every artist because every artist is different and wants a different look from their tools.

> **Tip**
> Having trouble getting smooth-looking inks? Ink while zoomed in! I find that zooming in to a 300 dpi or larger image at 250% and then inking works best for me. The lines look a little shaky when I'm zoomed in, but upon zooming back out, the lines look smooth and crisp!

Let's briefly discuss each of the categories of tools that we can use to ink in Clip Studio Paint.

Marker tools

From Micron pens to the basic Sharpie, most artists have used marker tools on paper to ink their work at some point in their lives. In Clip Studio Paint, marker tools are characterized as having a set line width, meaning that they don't get thicker or thinner no matter how light or hard we press with the stylus.

Even though these tools give us a line with no variation to the width, they are still valuable in some inking situations. For instance, backgrounds (especially background elements that are far in the distance and therefore have thin lines and less detail), machines, and other inorganic objects look great when inked with a line that has less variation. Despite not getting thicker and thinner as we press, we can always change the size of the marker tip to get some variation in our lines by making them thicker or thinner manually, instead of with pressure.

The marker tools can be found under the **Pen** category, and they are a tab of sub tools under that category. Here is a screenshot of the **Marker** tools in the **Sub Tool** palette:

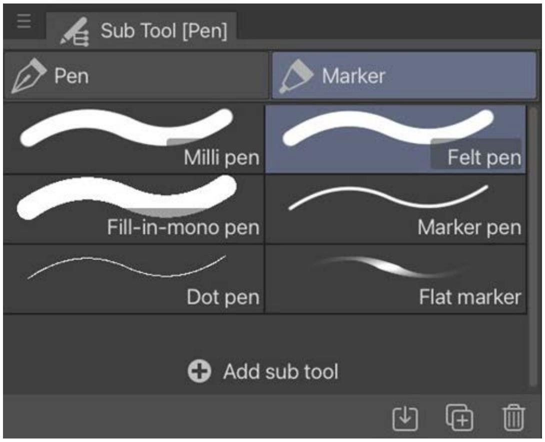


Figure 8.9 – Screenshot of the Marker Sub Tool palette

Let's have a look at some more inking tools.

Pen tools

Pen tools are the primary tools for inking, both in the digital and the analog art worlds. With a bit of practice, we can ink anything with pen tools. Pen tools in Clip Studio Paint have pressure sensitivity, allowing us to make thick and thin lines depending on how hard we press with the stylus.

> **Tip**
>
> Having issues with your tools in Clip Studio Paint? Go to the website of your tablet brand and make sure that you have the most up-to-date drivers for your model of tablet installed. Some of the most common software issues are just problems with outdated drivers. Make sure to have a backup of the previous drivers too, just in case there's a bug in the newest drivers!

For the traditional artist switching to digital who inks with brush or nib pens, the pen tools in Clip Studio Paint are going to give you the most familiar feel when inking, especially if you have a tablet stylus with a changeable nib. Wacom brand tablets usually have different tips that can be put on the stylus to give a different feel against the tablet, whether it be extra friction to make the experience more like working on paper or a spring-loaded nib that gives the squishy feel of a brush or nib. So, if you have one of these tablets with a nib that can be changed, be sure to experiment with it! Also, you'll want to make sure you have a few extra nibs on hand, because nibs can and will wear out over time and need to be replaced. You don't want to have a stubby nib and no fresh one when there's a deadline coming up!

The following screenshot shows the **Pen** tool category in the **Sub Tool** palette:

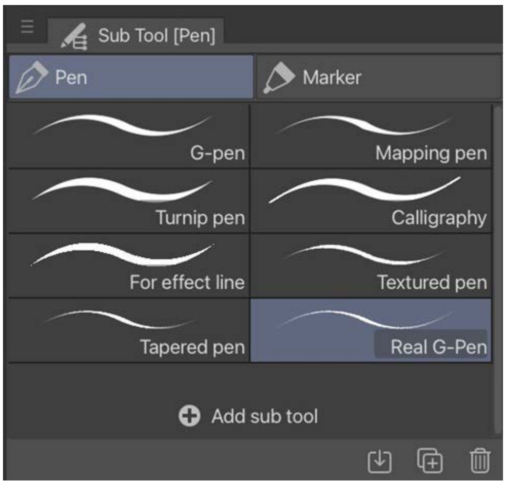


Figure 8.10 – Screenshot of the Pen Sub Tool palette

Tip

If you find your hand sticking to your tablet (or smudging your tablet, for those with screens or working on tablet PCs), you'll want to get a smudge guard! These gloves go on your dominant hand and are fingerless except for the pinkie and ring fingers, which have fabric to keep your skin from touching the tablet. You can make one yourself by getting a cheap pair of gloves and cutting off the thumb, pointer, and middle fingers, or you can buy one. A popular brand is `www.smudgeguard.com`.

We have been looking into pen tools and marker tools and what the differences between them are in this section.

We can customize our inking tools in many ways, but one of the easiest ways to start making tools on your own is to change the pressure sensitivity settings. In the next section, we will duplicate an existing tool and adjust its settings to make our own custom inking tool.

Customizing pressure sensitivity settings

All artists have their own preference on how to tilt a pen and how much pressure they put on paper. We can control this by using traditional pens on paper, but we need to configure our digital tools to make them understand what our preferences are.

We're going to create a sensitive pen that will give us thin lines, but also get thick rather quickly. Follow these steps to complete this exercise:

1. Select the **G-pen** tool from the **Pen Sub Tool** palette.
2. Click on the **Create copy of currently selected sub tool** icon at the bottom right of the **Sub Tool** palette to make a copy of the G-pen tool.

3. Name the new tool with a name of your choice. In the following screenshot, we are naming the tool `Responsive Pen`:

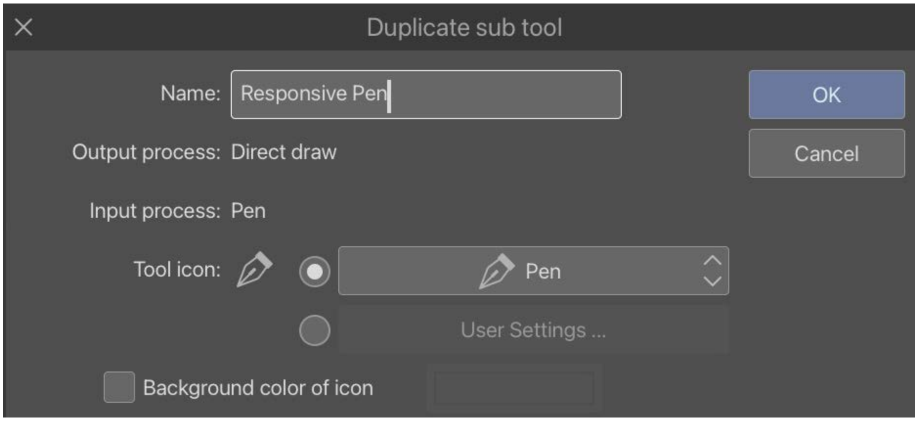


Figure 8.11 – Screenshot of the pen Duplicate sub tool window

4. Click on **OK** to complete making the tool copy.
5. In the **Tool Property** palette, click on the wrench icon to open the **Sub Tool Detail** window.
6. Change **Brush Size** to **8.0**.
7. Click on the button to the far right of the **Brush Size** option to open the **Brush Size Dynamics** options.
8. Ensure that the checkbox next to **Pen pressure** is checked. The **Brush Size Dynamics** window should look as in the following screenshot:

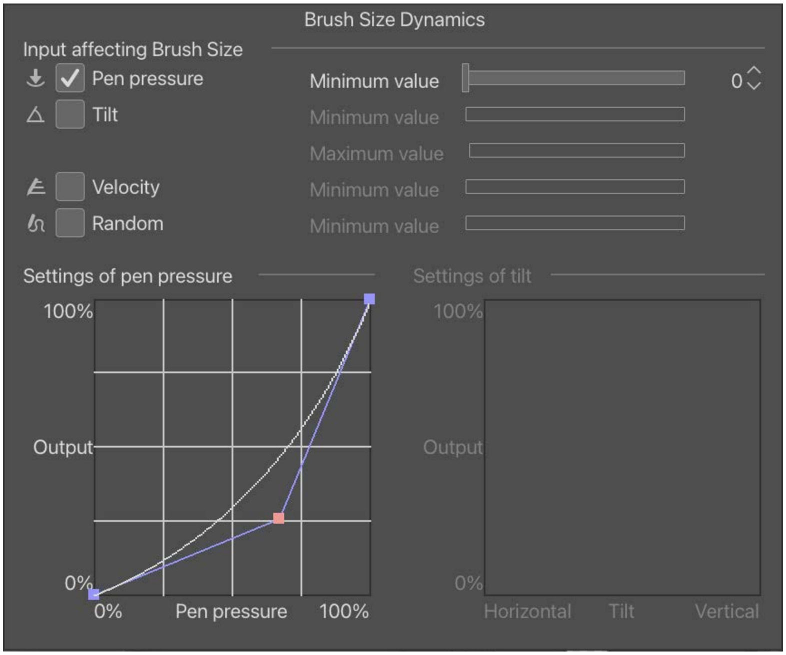


Figure 8.12 – Screenshot of the Brush Size Dynamics window

9. The **Minimum value** slider controls how small our pen can get. It is set to **0**, indicating that if we use light pressure, we can create a break in the line. You can change this slider to a different minimum value if you want to make a tool that always gives lines of at least some thickness.

10. The curve graph at the bottom marked **Settings of pen pressure** controls how quickly the pen goes from **0%** to **100%** as we increase the pressure on the stylus. We are going to change this from the gentle curve it currently is into an S-curve. To do that, click on the curved line to add a second control point. Then, adjust the purple handles in order to make a shape like the one in the following screenshot:



Figure 8.13 – Screenshot of the Brush Size Dynamics window with an S-curve setting

11. Test out the pen on a new canvas. Press lightly and then press harder as you make strokes. Experiment with making lines slowly and quickly. Adjust the curve settings as needed until you like the feel of the new pen tool.
12. If your tablet supports **Tilt** settings, you can also experiment with these settings by enabling the checkbox next to the **Tilt** option in the **Brush Size Dynamics** window and adjusting them in the same way as we did for the pen pressure.
13. The more control points you add to the curve, the more erratic the pen will behave. Experiment with the settings until you get the results you like!
14. Once you have finished adjusting the settings, close the **Sub Tool Detail** palette. You are now ready to use your new pen on your drawings!

Doesn't it feel like your pen understands how you behave when you draw? Great, you can now change pressure settings anytime using the steps we learned in this section whenever you want more suitable drawing tools.

In the next section, we are going to discuss how to ink on vector layers. Yes, it's different from inking on raster layers as we have been learning, but believe me, it's equally useful. Let's find out more!

Inking on vector layers

For a beginner inker, inking on a vector layer is very forgiving because of the editable nature of vector lines. (For more information on vector lines, see *Chapter 10*, *Vector Layers and the Material Palette*). If you are just starting out with inking, or if you want to be able to draw an inked line once and then tweak it until it's perfect, inking on a vector layer is going to be perfect for your needs! However, beginner inkers, remember that in the digital realm, even ink can be erased, and the **Undo** button will forgive most sins. So long as you remember to begin inking on a layer separate from your sketch, you will be able to erase and tweak your lines regardless of whether you go with raster or vector inks.

For an example of how we can tweak ink lines on vector layers, let's take a look at the following screenshot, which has lines we made with a pen tool and hasn't had any vector adjustments made yet:

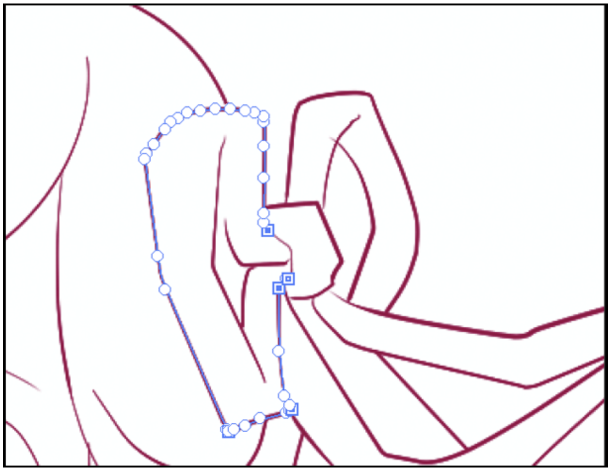


Figure 8.14 – Screenshot of a vector free-hand drawing

Note that some of the lines are shaky and lack the smoothness of a confident inking hand in the previous example. After we use the **Simplify Vector Line** tool and the **Correct Line Width** tool on the lines, we can end up with the smoother and more elegant lines of the following screenshot:

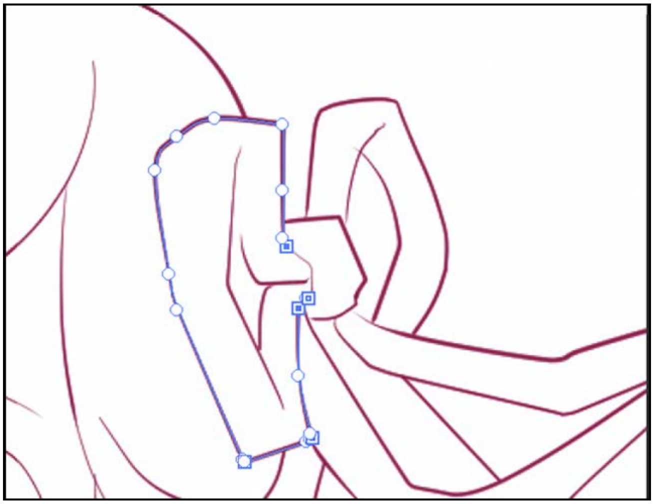


Figure 8.15 – Screenshot of the corrected vector free-hand drawing

Whether you ink on raster or vector layers is, of course, up to you and your preferences. The more you practice with inking, the better you will become! In the next section, we will look at some tips on how to ink comic panels effectively.

Tips for inking comic panels

Now that we have some foundational knowledge of inking and inking tools in Clip Studio Paint, let's talk about inking a comic page. These are some general tips, of course, because we could write an entire book just about inking comics (and entire books have, in fact, been written about this!). But for those just starting out, here are some general tips that make the inking process a little easier:

- Start with the panels that you're most excited about inking. In traditional inking, we would start from the opposite corner of our dominant hand and ink diagonally across the page and down to avoid smearing drying ink, but with digital inks, we don't have to worry about that. Start with whatever panels you wish to ink first and move around the page as you like.

- Remember to turn on the **Layer Color** option on any pencil layers before beginning to ink. This ensures that we can easily see where we've inked already and any lines we may have missed, and keeps us from inking on the wrong layer and having to start all over again.
- Ink on separate layers for characters and backgrounds, or the foreground and background. I like to separate my characters from the backgrounds and then apply layer masks as needed. This not only allows me to adjust the position of characters or background elements easier but also ensures that backgrounds can be reused in other panels if needed.
- Use the eraser tools or the transparent color to correct your mistakes. Remember that digital ink isn't permanent! We can adjust it, delete the ink layer, and start over, or add textures using erasers or tools set to the transparency option.

If you really want to improve your inking, there are hundreds of resources on the internet where artists post their penciled work for others to ink and/or color. Make sure that you have the permission of the original artist to use this work, and that you give credit and a link to the artist's website if you post your inked version somewhere! Practice is the best way to improve and to find your own style.

Modifying pencil layers to simulate ink

So, you've been trying hard to improve your inks, but you just hate the process. I know many artists who love the pencil process and love to color, but they absolutely despise inking. If you are one of those artists who just can't get the hang of inking, you can modify your pencils to get an inked look without having to go over the pencil sketch again.

Depending on your style of art, this modified pencil method may work best if your pencils are "tight," meaning that they are very clean, smooth, and defined. My own finished pencils are very loose and sketchy—because I love to ink so I don't spend a lot of time on pencils unless I really need to—but if you have a loose style like me, you can still use this easy technique! The important thing is to get the style that you want for your project. If a looser line that is less refined fits with your goals for your project, then don't be afraid to use it!

In the following steps, we are going to use duplicated layers to give an inked look to the pencils, as shown in the following screenshot:

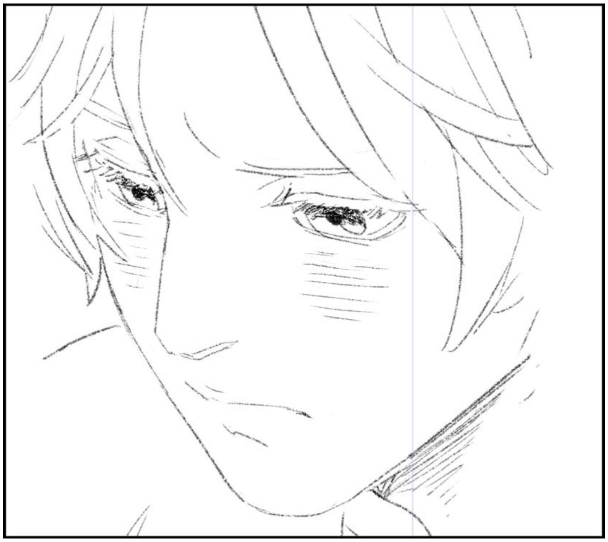


Figure 8.16 – Screenshot of a pencil drawing

15. Select the pencil layer of your image. Note that the pencils *must* be on their own layer for this technique. The layer should have only pencils and transparency, no paper color or other fills.
16. Click on the **Duplicate Layer** icon in the **Layer** palette when the layer is selected. (This also works when multiple layers are selected.) Now that the pencil layer is duplicated, the pencil lines should appear darker and sharper as a result of the two layers sitting on top of each other. Compare the following screenshot with *Figure 8.16* to see the difference:



Figure 8.17 – Screenshot of a duplicated pencil drawing

17. If desired, continue to duplicate and stack the pencil layer to darken the lines. The following screenshot is made of three copies of the pencil layer stacked on top of each other to produce a dark and defined line that looks like it's been produced with the pen tool:

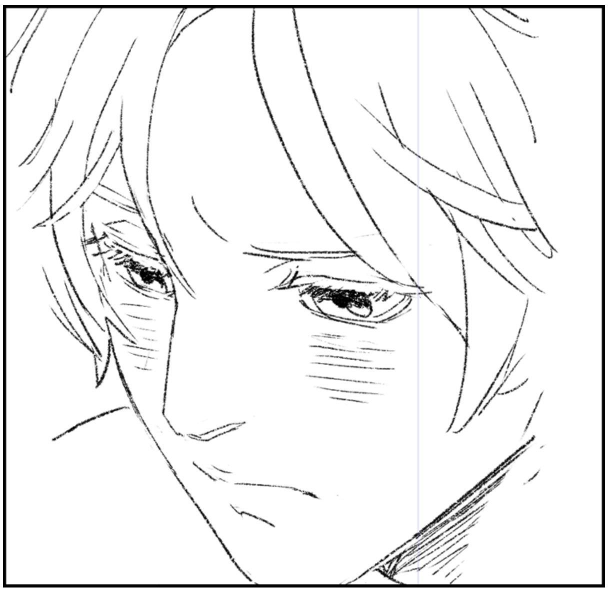


Figure 8.18 – Screenshot of more duplicated pencil drawings

Now you know the basic inking methods that Clip Studio Paint offers. You also understand realistically what digital inking is all about.

Summary

In this chapter, we covered the reasons for inking and some basic principles for making clear and dynamic inked lines. We explored the marker and pen tools, two of our workhorses for making inks in Clip Studio Paint, and learned how to adjust the pressure settings in the pen tools to customize our tools. We talked about inking on vector layers and the benefits of doing so. We also went over some inking tips specific to creating comic panels and learned how to duplicate layers to simulate ink from pencil lines. Now you can take a control of inking tools!

Let's take another step in becoming a Clip Studio Paint master. In the next chapter, we will discuss how to ink some special effects. We will also make a brush with custom brush tips to produce a special effect, and discuss more of the special tools such as creating textured ink brushes, which will expand your digital drawing utilities.

9
Inking Special Effects

Sometimes inking requires us to answer a set of questions relating to how to render something. How can we make a textured, grungy look? How can we use the digital space to make repetitive inking tasks easier and more efficient?

Becoming familiar with the other drawing tools and how to customize them is the best way to save time when drawing. When you have a core understanding of how to create and customize tools, you can make special ones that solve problems and speed up your workflow. Some people who don't understand digital art refer to this as cheating because they think that the software is doing the work for you. However, making custom tools that can create a grungy effect, or make lightning, or even create a crowd scene for us is no more cheating than using a ruler or a compass on a piece of paper. It is merely making the most use of your tools and finding solutions to the unique challenges you face as an artist.

In this chapter, we will build a foundation that will allow you to create your own custom tools. Each exercise is designed to build on the skills learned in the previous one to take you through the different options in the brush engine. The following topics will be covered in this chapter:

- Creating a textured inking brush
- Making a broken glass shard brush
- Creating a foliage brush
- Texture with a cross-hatching brush

Let's get going right away!

Technical requirements

To get started, you need Clip Studio Paint installed on your device, and a new canvas should be open without any background color. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content of this chapter.

Creating a textured inking brush

In this section, we will be creating a textured inking brush that will help us depict a certain grungy look. This exercise will get us familiar with creating and saving a custom brush tip and adjusting some of the brush tip settings in the **Sub Tool Detail** palette. Complete the following steps to make this textured inking brush:

1. On a new canvas, create a new raster layer. Make sure that **Color Expression** in the **Layer Property** palette is set to **Gray**.
2. Select the **Airbrush** tool and the **Droplet** sub tool. On the gray layer, make a circular shape with the **Droplet** tool, using pure black as the active color. Don't make this too precise; we want some variation to it. Your shape should look something like this:

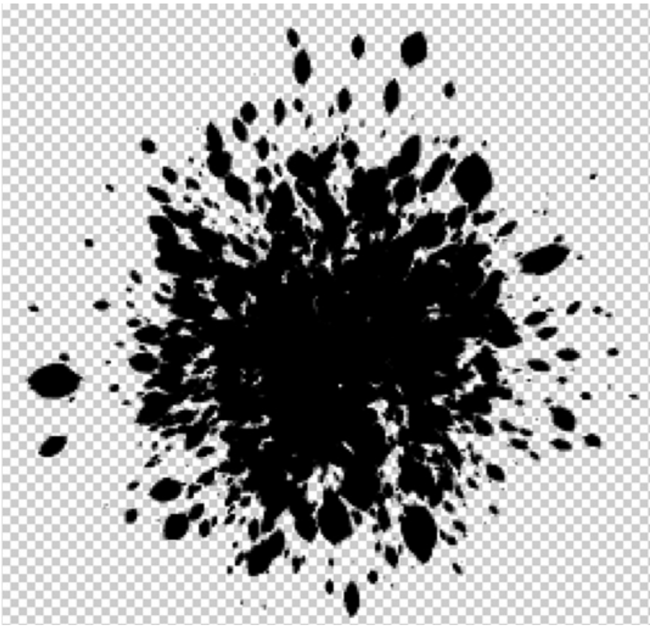


Figure 9.1 – Screenshot of the Droplet tool's mark

3. Turn off all layers apart from the one with the shape we created in the previous step. This includes any paper layers! We only want to see our new brush tip shape before completing the next step.
4. In the **File** menu, click on **Edit | Register Material | Image....** This path is shown in the following screenshot:



Figure 9.2 – Screenshot of the Register Material menu

5. This will bring up the **Material property** window. Enter a **Material name** value that is descriptive and unique. **Material image** shows us a preview of the shape we are saving. Check this to ensure that there is nothing else showing that we don't want to have in our brush shape.

6. Click on the checkbox next to **Use for brush tip shape**. Then, select the **Brush** sub-folder under the **Image material** folder to store the material in.
7. Finally, enter a few tags by clicking on the + icon at the bottom of the **Search tag** window. This will allow us to search for our material easily when we go to make our tool. Your **Material property** window should look like the following screenshot:

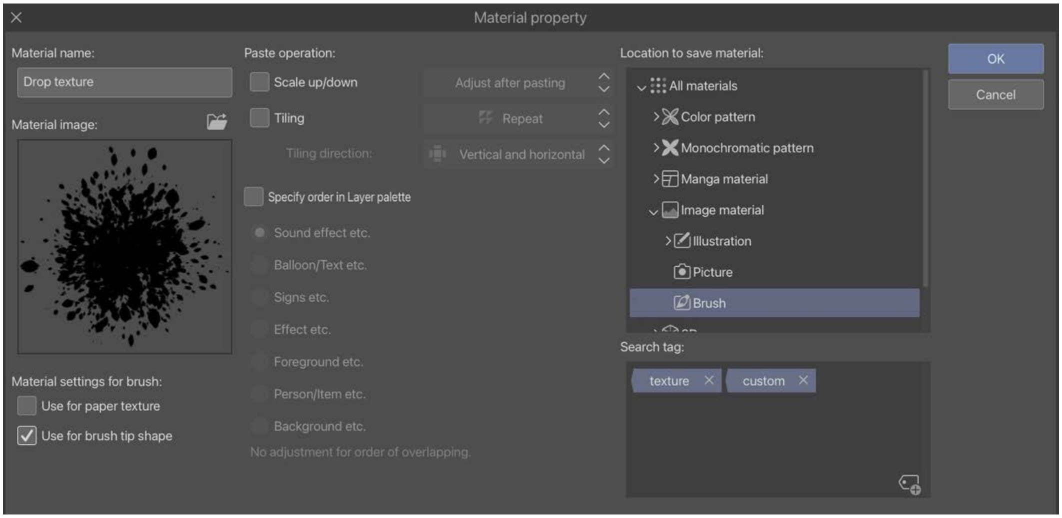


Figure 9.3 – Screenshot of the Material property window

8. Click **OK** in the **Material property** window once all the parameters are set. This saves our new material.
9. Using the instructions from *Chapter 8*, *Getting Started with Inking Tools*, create a copy of the G-pen tool. Name this new tool `Drop Texture`.
10. Use the wrench icon to open the **Sub Tool Detail** palette.
11. Click on the **Brush Tip** category on the left side of the **Sub Tool Detail** palette.
12. Next to **Tip Shape**, click on the button marked **Material**. The box beneath **Tip Shape** will now say **Click here to add tip shape**. Click in this box to bring up the **Select brush tip shape** window.
13. In the **Select brush tip shape** window, locate the brush tip we made at the beginning of this exercise. Click on it to select it, as shown in the following figure:

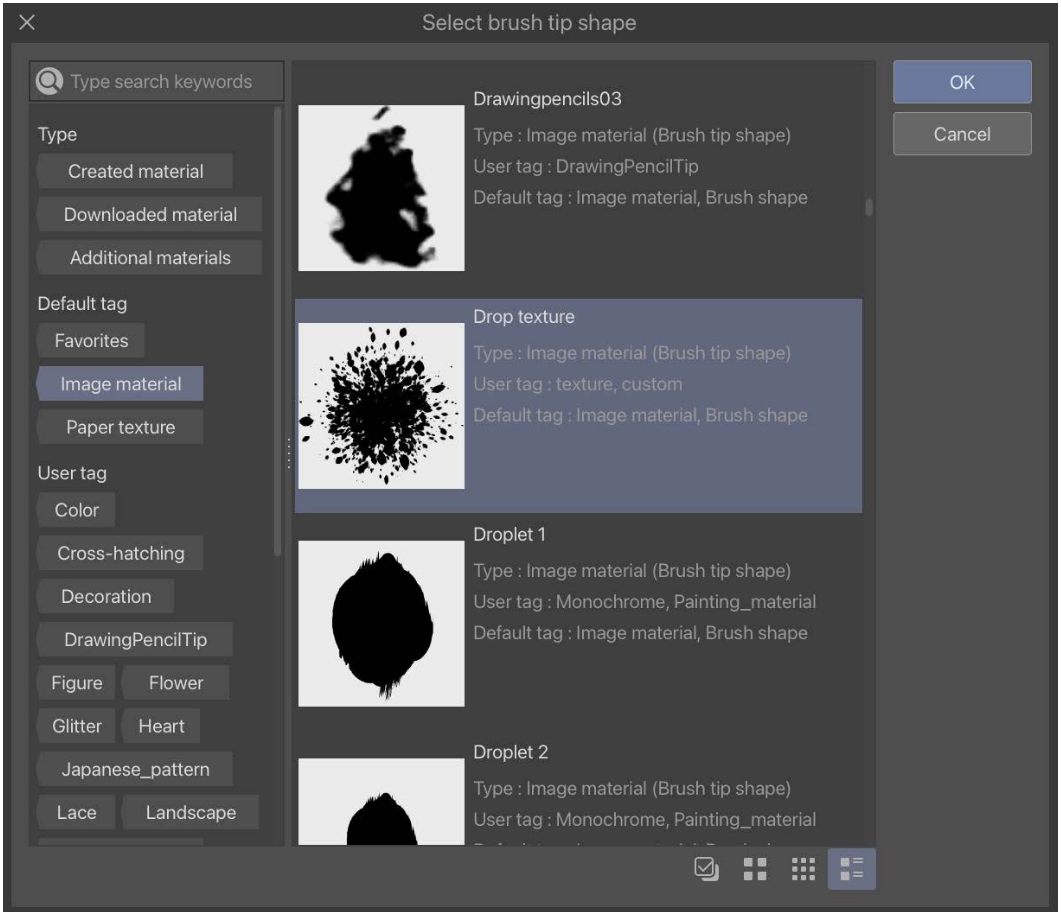


Figure 9.4 – Screenshot of the Select brush tip shape window

14. Click **OK** to confirm the tip shape. This will take us back to the **Sub Tool Detail** palette.

15. While still in the **Brush tip** options, click on the button to the far right of the **Thickness** option. Check the **Random** box to turn on this parameter, as shown in the following screenshot:

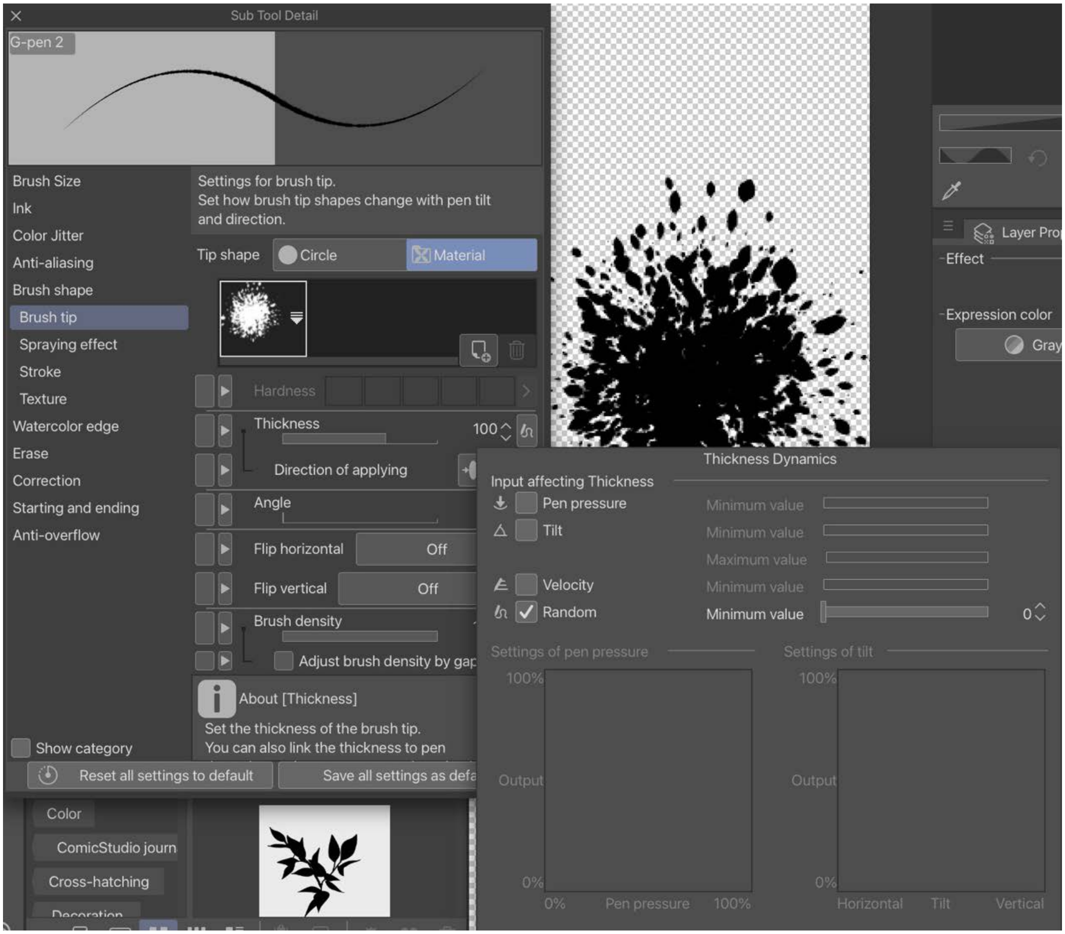


Figure 9.5 – Screenshot of the Thickness Dynamics window

16. Repeat *step 15* for the **Angle** option as well, as shown in the following screenshot:

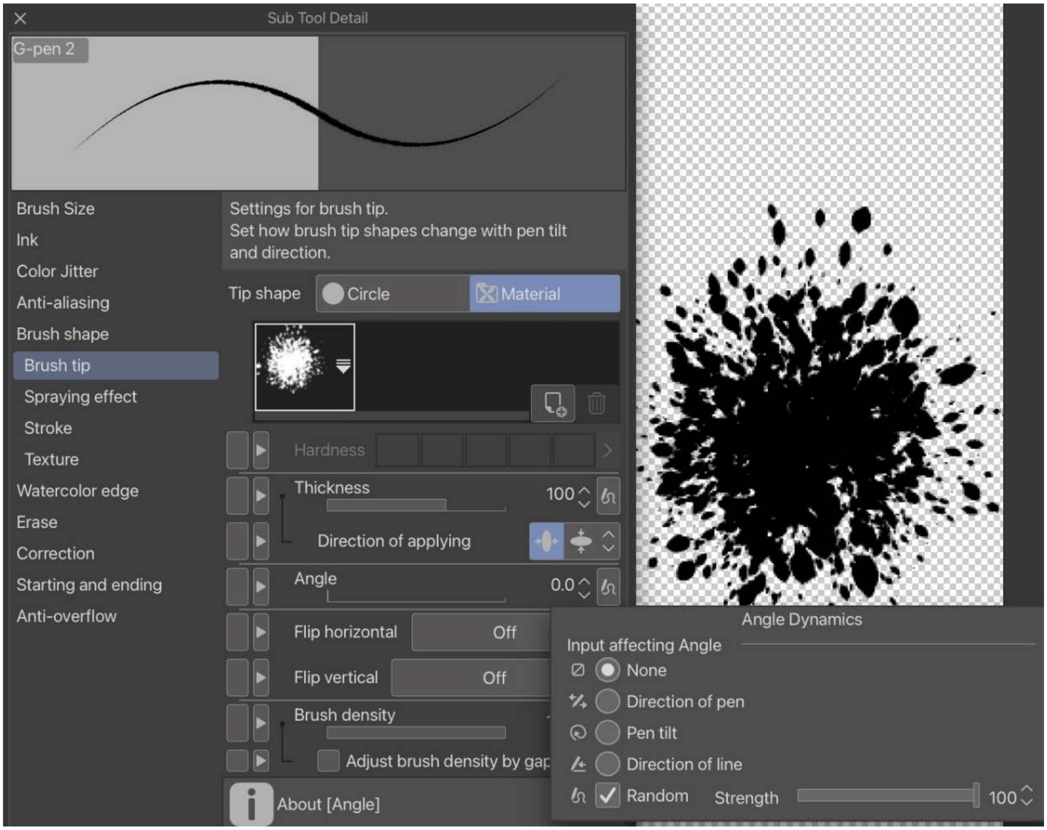


Figure 9.6 – Screenshot of the Angle Dynamics window

17. Test your new textured inking brush!

This textured inking brush will give you results like what you see in the following figure:



Figure 9.7 – Screenshot of a sample image with the new texture brush

Note that the other lines are slightly out of focus to emphasize the mood.

Wow, you have made a special brush tip of your own!

Do you want to learn more about these special brushes? Read on to learn about a different brush.

In the next section, we will create a brush that will help us create a more complex effect.

Making a broken glass shard brush

By utilizing the features of Clip Studio Paint, we can save time with a brush that will make applying an otherwise tedious-to-achieve special effect a simple affair. We will create a brush that will make shards of broken glass rain down on our images. Follow these steps to create this brush:

1. Open a blank canvas, preferably at least 300 dpi. You do not need to use the **Paper** option in this canvas; in fact, we want a transparent background.
2. Using your preferred drawing tools on an empty layer, draw the outline of several jagged, broken glass shapes. Use black or dark gray for the outlines.
3. Create a new layer behind the outline layer. In this layer, fill the glass shapes with solid white.
4. Lower the opacity of the white layer to 50% by using the slider at the top right of the **Layer** palette.
5. Merge the outline layer with the 50% transparent white layer by clicking on **Layer** in the **File** menu and clicking on **Merge visible layers**. (Note that this will combine any layers that are currently visible, so make sure that your only visible layers are the glass shard outlines and the 50% white fill.) You should have a transparent background and your canvas should now look something like the following screenshot:

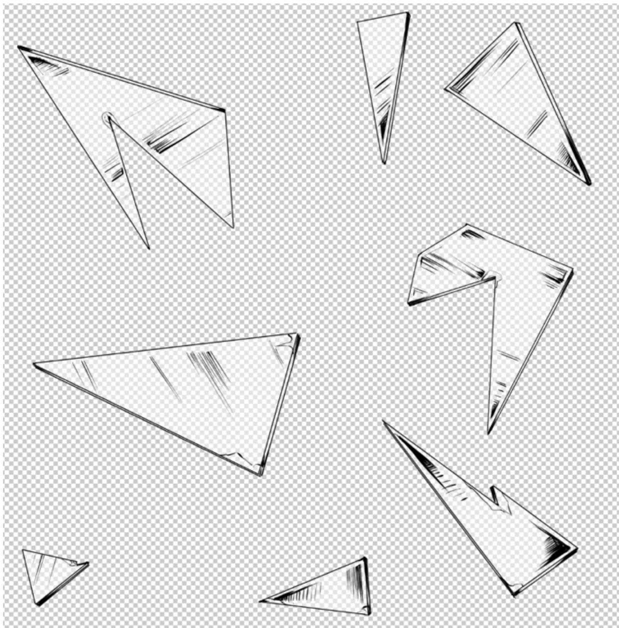


Figure 9.8 – Screenshot of the broken glass drawing

6. In the **File** menu, click on **Edit | Register Material | Image....** This path is shown in the following screenshot:



Figure 9.9 – Screenshot of the Register Material menu

7. This will bring up the **Material property** window. Enter a **Material name** value that is descriptive and unique. **Material image** shows us a preview of the shape we are saving.
8. Check this to ensure that there is nothing else showing that we don't want to have in our brush shape.
9. Click on the checkbox next to **Use for brush tip shape**. Then, select the **Brush** sub-folder under the **Image material** folder to store the material.

10. Finally, enter a few tags by clicking on the + icon at the bottom of the **Search tag** window. This will allow us to search for our material easily when we go to make our tool. The settings will look as follows:

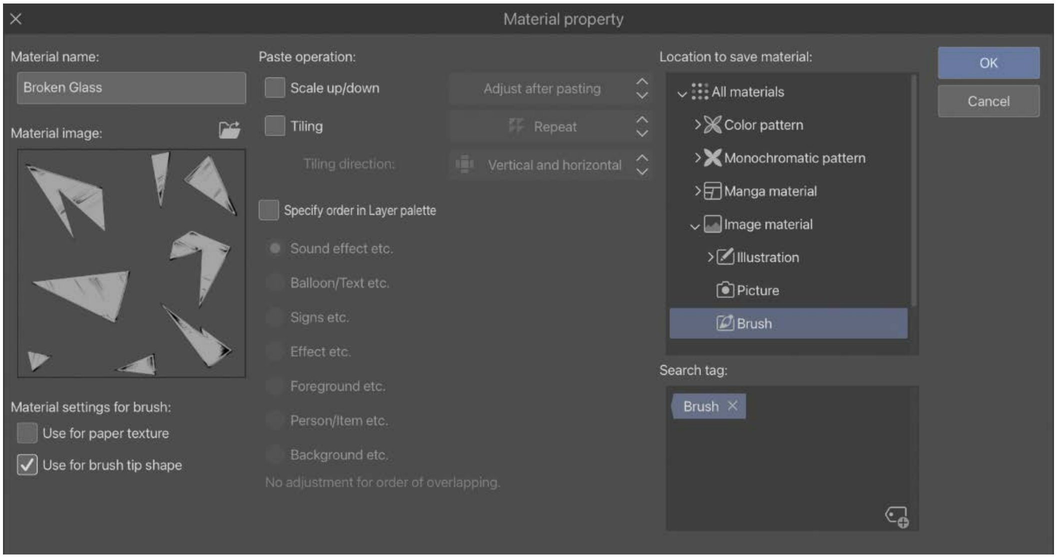


Figure 9.10 – Screenshot of the Material property window

11. Click **OK** in the **Material property** window once all the parameters are set. This saves our new material.

12. Duplicate the G-pen as we did in previous sections. Name the new sub tool `Broken Glass`. Click **OK**.

13. In the **Tool Property** palette, click on the wrench icon in the lower-right corner to open the **Sub Tool Detail** screen.

14. Change **Brush Size** to `60.0`. Open **Brush Size Dynamics** to set **Minimum value** to `15` and edit the curve to look like the one in the following screenshot:

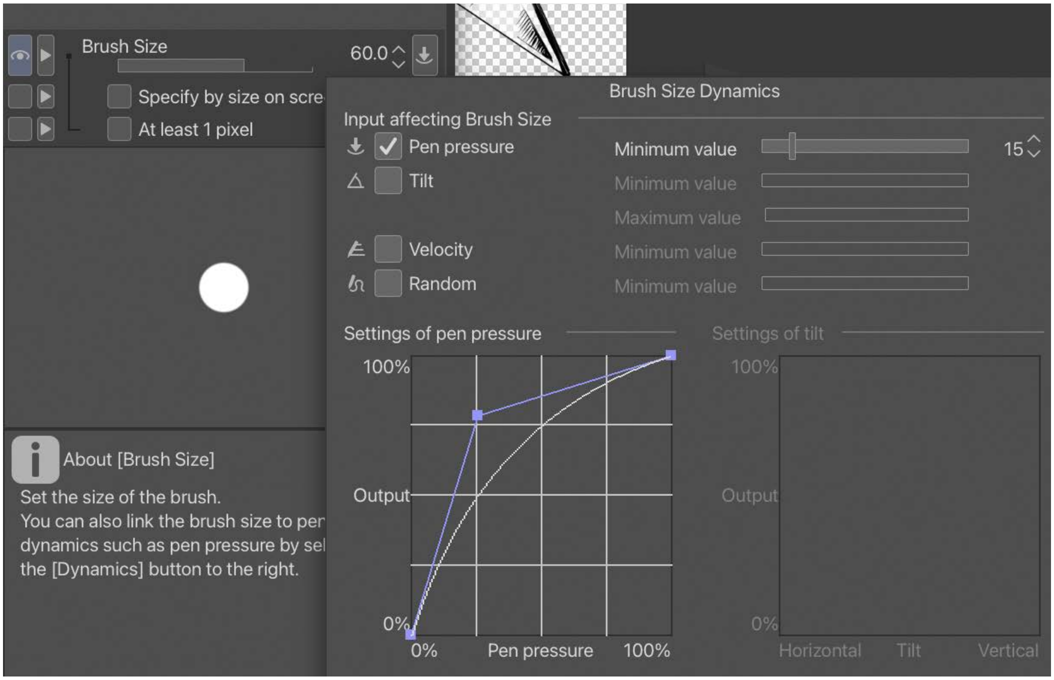


Figure 9.11 – Screenshot of the Brush Size Dynamics window

15. Click **Anti-aliasing** in the **Sub Tool Detail** palette and select **Middle**.
16. Click on **Brush tip** in the **Sub Tool Detail** palette.
17. Click on the **Material** button under the **Tip Shape** option. The box beneath **Tip Shape** will now say **Click here and add tip shape** as in the following screenshot.

18. Click in this box to bring up the **Select brush tip shape** window:

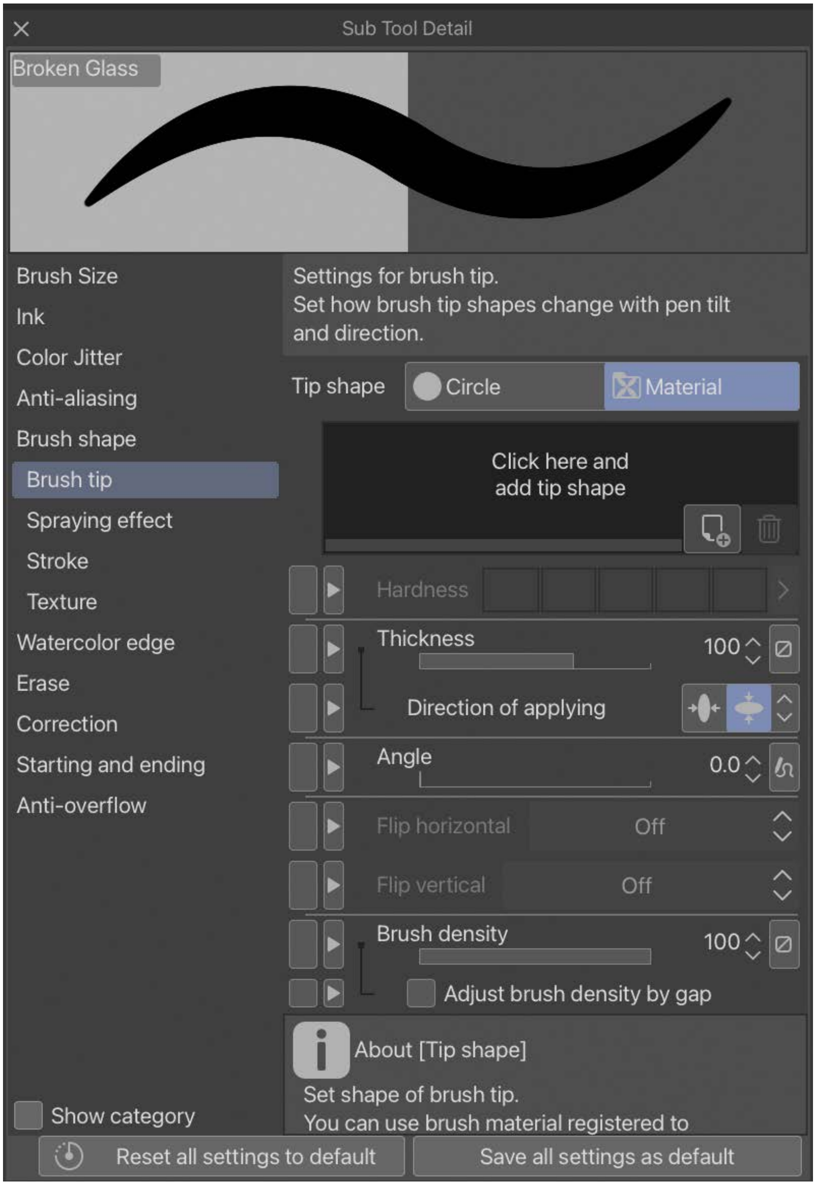


Figure 9.12 – Screenshot of the Brush tip menu

19. Locate the glass shard shapes we made at the beginning of this exercise. Highlight them in the **Select brush tip shape** window, as shown in the following screenshot, and click **OK**:

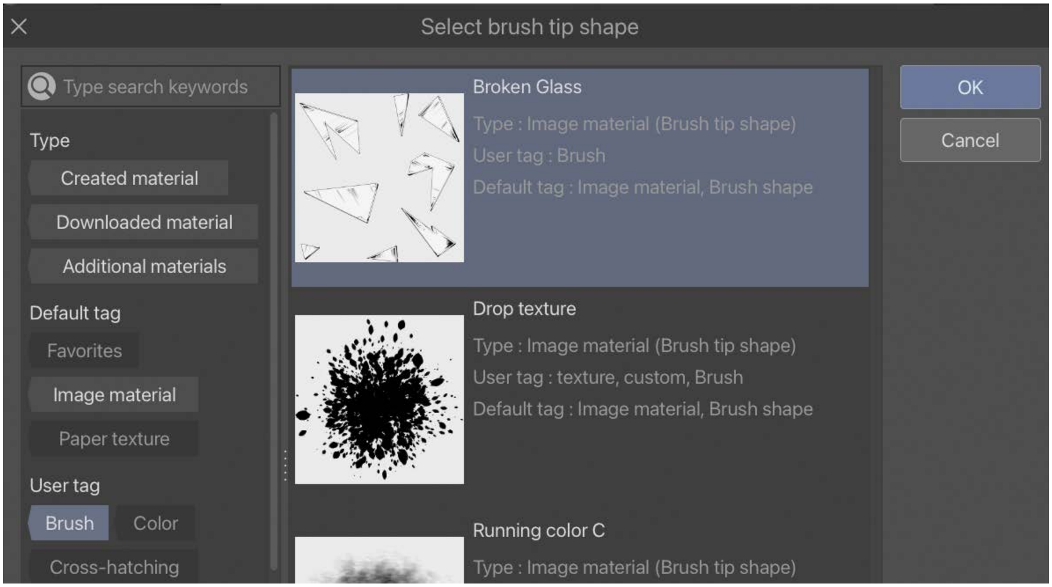


Figure 9.13 – Screenshot of the Select brush tip shape window

20. In the **Brush tip** settings, click on the icon to the right of the **Thickness** option. Check the box next to the **Random** option and set the minimum value to `65` as shown in the following screenshot:



Figure 9.14 – Screenshot of the Select brush tip shape window

21. Click on the icon to the right of the **Angle** option and select the **Direction of line** option. Check the box next to the **Random** option and set **Strength** for the effect to `100`, as in the following screenshot:

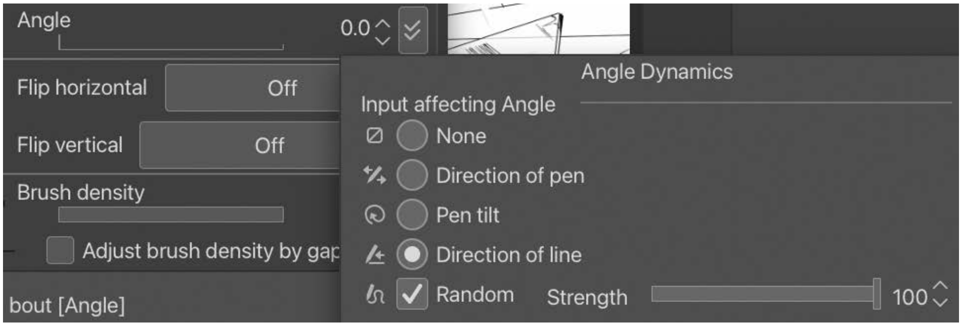


Figure 9.15 – Screenshot of the Angle Dynamics window

22. In the **Sub Tool Detail** window, click on the **Stroke** category.
23. Set the **Gap** option to **Fixed** by clicking on the first icon (the one with one full circle in the center of it).
24. Use the slider under the **Gap** option to set the value to `150.0`.
25. Set **Repeat method | Random**, as in the following screenshot:

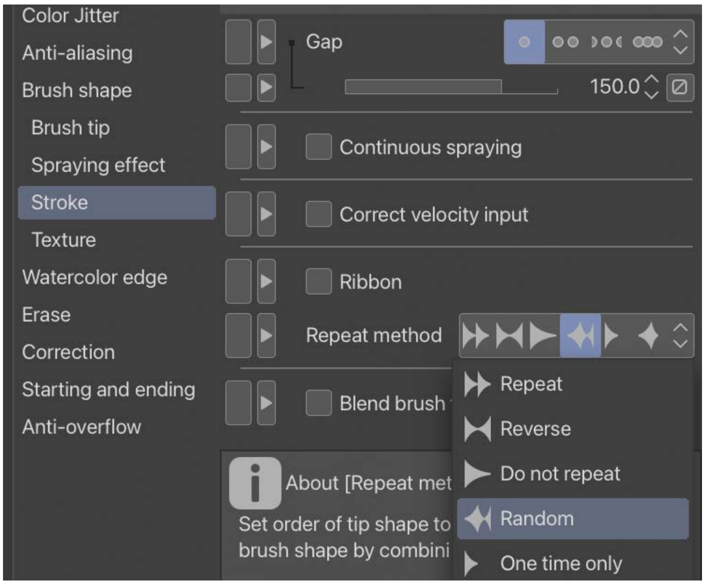


Figure 9.16 – Screenshot of the Repeat method drop-down menu

26. Test your new brush!

The brush will give us the effect shown in the following figure:

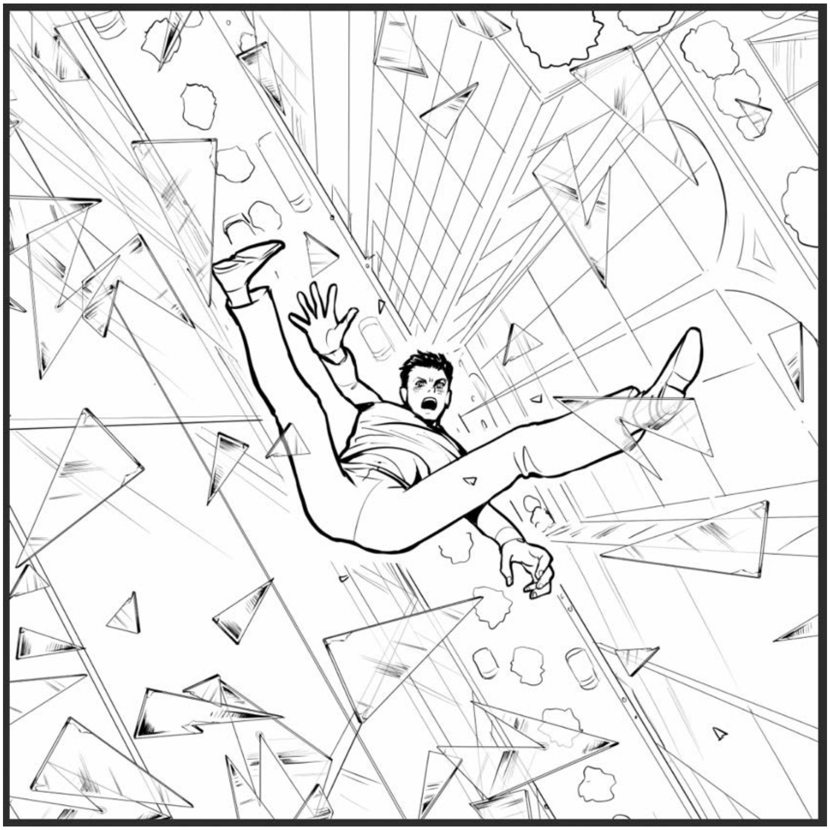


Figure 9.17 – Screenshot of a sample image using the broken glass brush

By changing the **Thickness**, **Angle**, and **Repeat method** options to **Random**, we get a random rotation and direction of the glass shard shapes as we use the brush. By changing the **Gap** option, we make the brush tip shapes show up far apart from each other, instead of in a continuous stroke, like with other drawing tools.

Next, we will create a brush that helps us draw different aspects of nature. With a customized foliage brush, you can draw a tree and its leaves super easily! Let's have you make your own by following the steps in the next section.

Creating a foliage brush

I don't think I need to keep it a secret that the foliage brush is one of my favorite specialty brushes ever created. This brush makes drawing detailed trees and bushes easier, and it introduces us to the **Ribbon** options in the brush details.

In the following set of steps, we will create a leafy material and then make it into a brush that rolls out like a spool of ribbon:

1. Open a new blank canvas with at least 300 dpi resolution.
2. Using an inking pen, draw a row of leaves similar to the top of a tree or bush.
3. Fill the leaves with white. Use the following screenshot as a guide to create your leaves and the white fill. You need a transparent background as we had in the previous sections of this chapter:

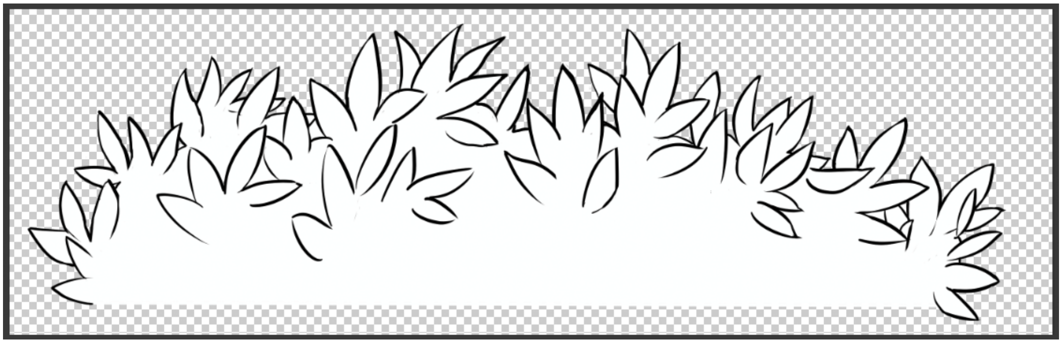


Figure 9.18 – Screenshot of drawing leaves

4. In the **File** menu, click on **Edit | Register Material | Image....**This path is shown in the following screenshot:

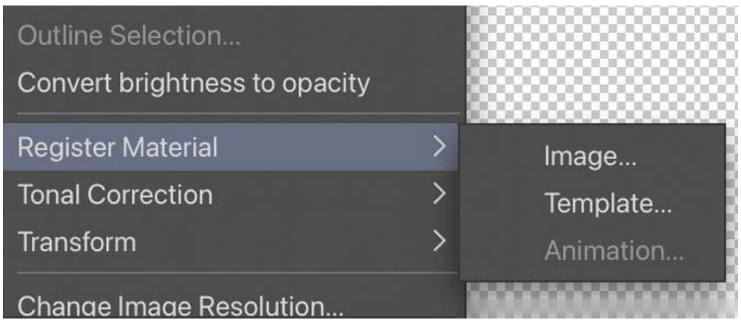


Figure 9.19 – Screenshot of the Register Material menu

5. This will bring up the **Material property** window. Enter a **Material name** value that is descriptive and unique. **Material image** shows us a preview of the shape we are saving. Check this to ensure that there is nothing else showing that we don't want to have in our brush shape.
6. Click on the checkbox next to **Use for brush tip shape**. Then, select the **Brush** sub-folder under the **Image material** folder to store the material in.

7. Finally, enter a few tags by clicking on the + icon at the bottom of the **Search tag** window. This will allow us to search for our material easily when we go to make our tool. Your **Material property** window should look similar to the following screenshot:

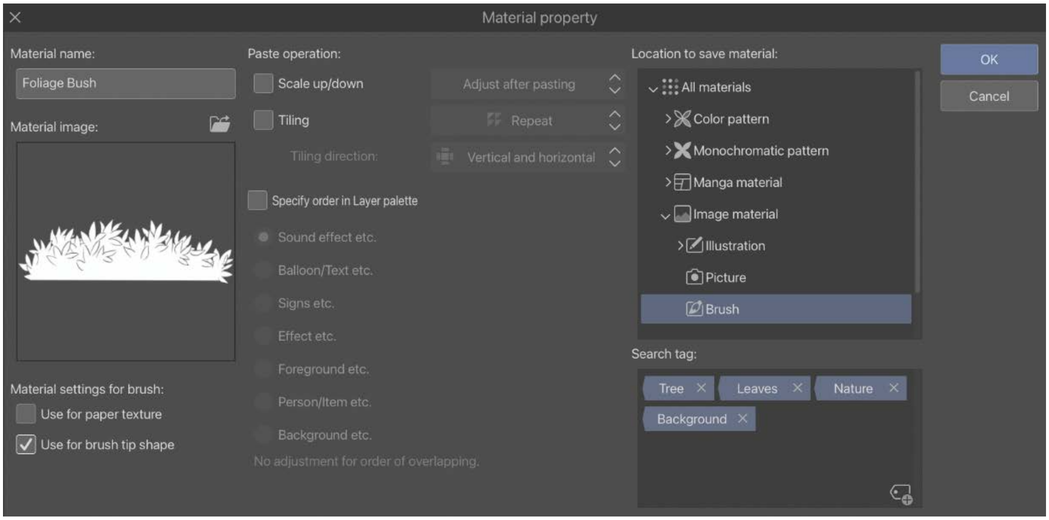


Figure 9.20 – Screenshot of the Material property window

8. Click **OK** in the **Material property** window once all the parameters are set. This saves our new material.
9. Make a copy of the G-pen and name this new tool `Foliage Brush`.
10. In the **Tool Property** palette, click on the wrench icon in the bottom-right corner to open the **Sub Tool Detail** palette.
11. Click on the **Ink** category of settings and ensure that **Opacity** is set to `100` and **Blending mode** is **Normal**.
12. Click on **Anti-aliasing** on the left-hand side of the **Sub Tool Detail** palette. **Anti-aliasing** should be set to **None**.
13. Click on **Brush tip** in the **Sub Tool Detail** palette.
14. Click on the **Material** button under the **Tip Shape** option. The box beneath **Tip Shape** will now say **Click here to add tip shape**. Click on this box to bring up the **Select brush tip shape** window.
15. Locate your leafy shape and click on it to select it. Click **OK** to load this material into the brush.
16. Set **Thickness** to `100`.

17. In the following screenshot, the leaf material is loading vertically instead of horizontally, which is not what we want:

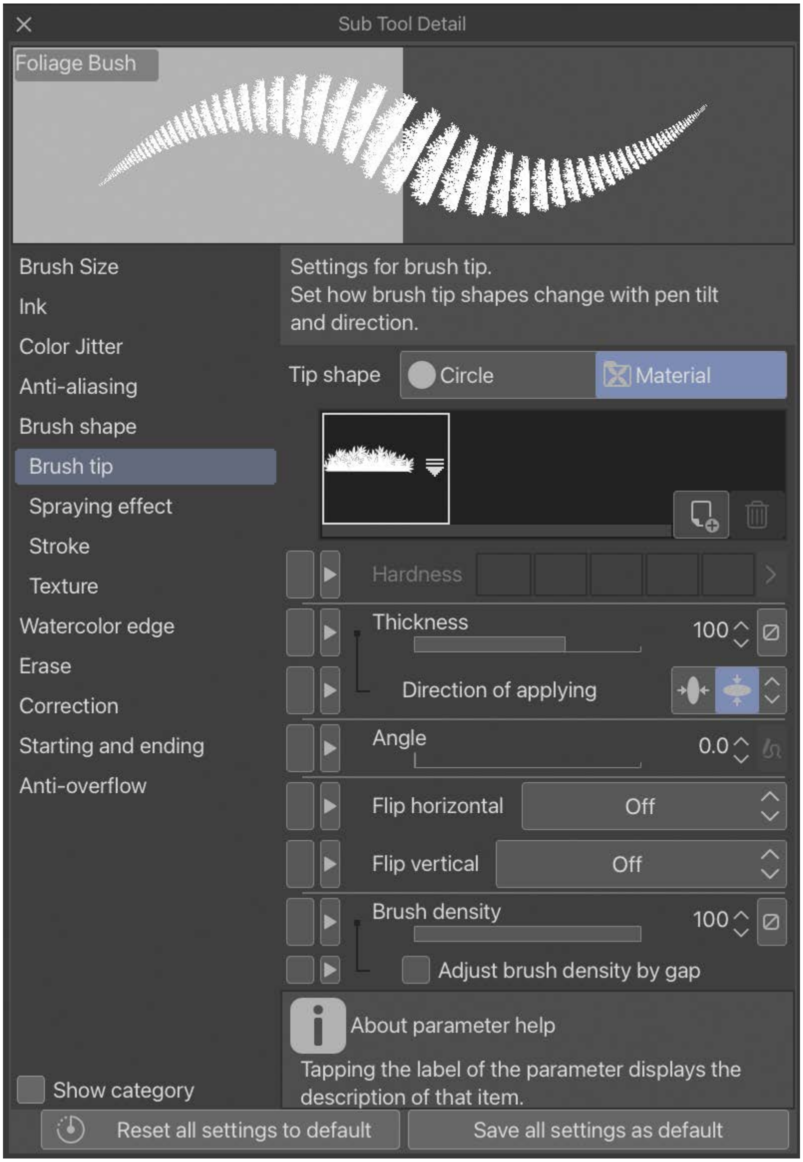


Figure 9.21 – Screenshot of the Brush tip menu

18. To change the orientation of the material shape, change the value of **Angle** from `0.0` to `100`. This should rotate the material to be horizontal, as shown in the following screenshot:

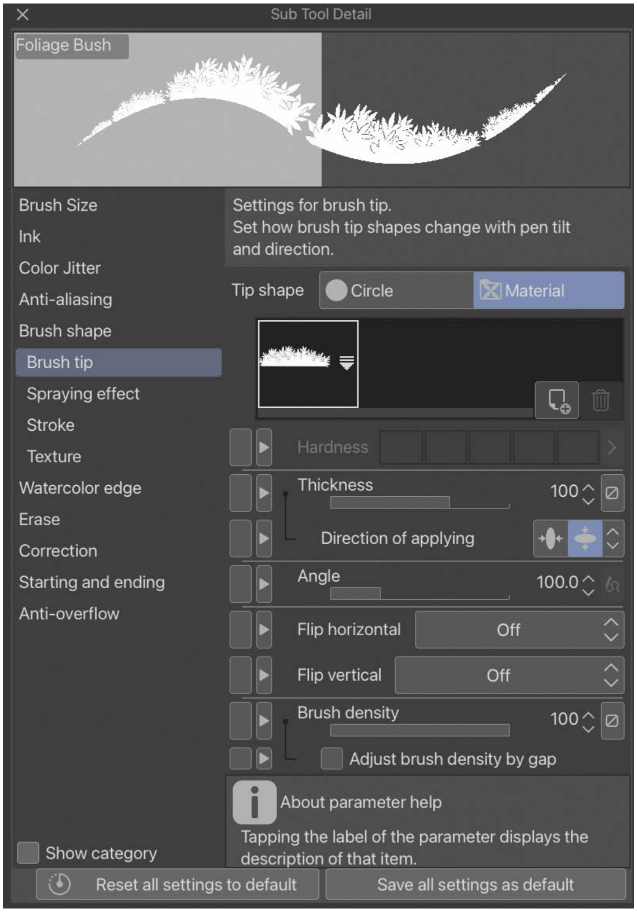


Figure 9.22 – Screenshot of the Brush tip menu

19. Click on the icon to the right of the **Angle** settings to open the **Angle Dynamics** window. Deselect the box next to the **Random** option as shown in the following screenshot:



Figure 9.23 – Screenshot of the Angle Dynamics window

20. Click on **Stroke** on the left-hand side of the **Sub Tool Detail** screen. Click on the checkbox next to the **Ribbon** option to activate it.
21. Test out your new brush.

This brush works best when it's used in layers. To understand what I mean, let's look at the process of creating a tree using this tool.

After sketching the trunk of the tree and the general shape of the leaves at the top, use the brush to go around the outline of the top. Work in a clockwise direction to ensure that the bottom leaves are in the correct orientation. Look at the following screenshot and note the direction of the arrows. This is the direction we are working in:

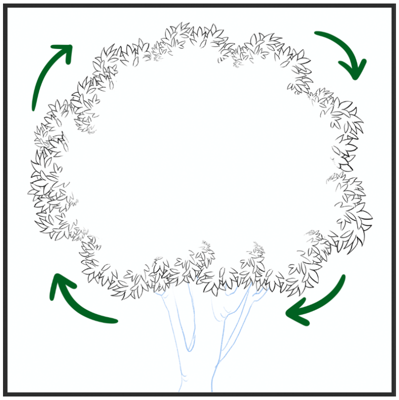


Figure 9.24 – Screenshot of the foliage brush's brushstrokes

Not bad, but it could look better! By continuing to work in the same clockwise direction, but slightly inside of the already-existing leaves, we can make more layers of foliage that will grow outward from the tree branches, as shown in the following screenshot:

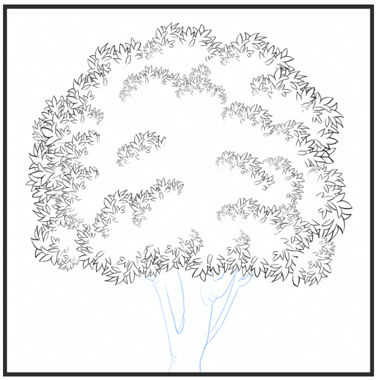


Figure 9.25 – Screenshot of the foliage brush's brushstrokes

By using the **Ribbon** setting, we get a brush that repeats in a pattern, unrolling like a pattern printed on tape. This is also what allows us to get the pattern to go upside down to make the bottom leaves without having to create a second brush with the brush tip material upside down. Layering the leaves gives us a detailed finished product!

By using the **Ribbon** option and playing with the **Repeat** method, we can make brushes that simulate patterned fabric trim, lace, ruffles, knit patterns, and even shoelaces!

In *Chapter 18*, *Exploring the Clip Studio Assets and Animation*, we will learn how to access the Clip Studio Paint assets download library, where you can get more ideas for custom tools to make or download tools made by other users.

Next, we will look at one of the most useful brushes – the cross-hatching brush. Read on to find out how to create one in the next section!

Texturing with a cross-hatching brush

Hatching is a shading technique achieved using groups of parallel lines. Cross-hatching is a group of parallel lines that cross another group in another direction, adding texture and the appearance of darker shading. Hatching and cross-hatching can add a lovely look of depth and texture to monochromatic illustrations. By making a hatching brush, we can achieve this look without the tedium of having to make all the lines by hand. When creating your new canvas to draw your brush tip, make sure that **Basic expression color** is set to **Gray** instead of **Color**. The following screenshot shows the drop-down menu in the new file creation window where this change can be made:

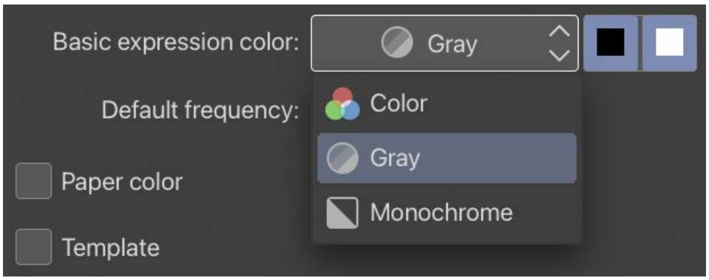


Figure 9.26 – Screenshot of the Basic expression color options

The following steps will walk you through the brush creation process:

1. Select the **Ruler** tool category and then the **Create ruler** sub tool category.
2. Select **Special ruler** from the **Sub Tool** palette.

3. In the **Tool property** palette, choose **Parallel line** from the **Special ruler** drop-down menu, as shown in the following screenshot:

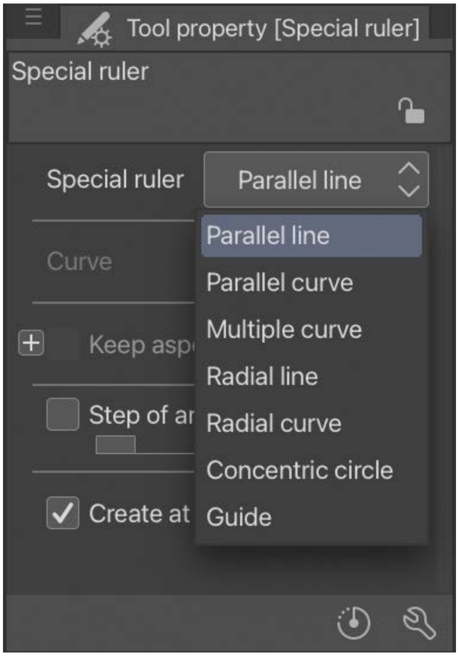


Figure 9.27 – Screenshot of the Special ruler drop-down menu

4. Click inside the canvas and hold down the mouse button or stylus. While still holding, drag the cursor across the canvas at an angle. Release the mouse button to set the ruler. The canvas should now look like this:

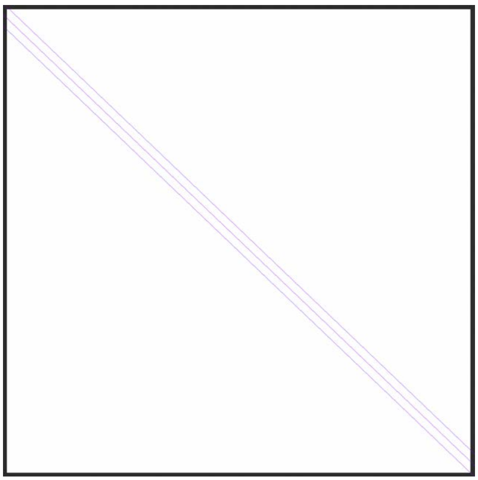


Figure 9.28 – Screenshot of parallel lines being set diagonally

5. Select your preferred pen tool from the **Pen** sub tools.
6. Ensure that the **Snap to Special Ruler** option in the main Command Bar above the canvas is active. This will make the pen follow the parallel line ruler. Refer to the following screenshot for the location of this icon:

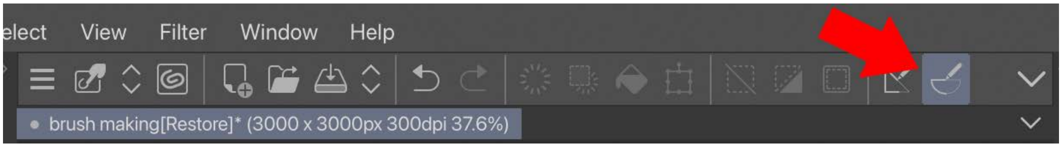


Figure 9.29 – Screenshot of the Snap to Special Ruler option

7. Using your preferred pen tool, draw a group of parallel lines, as shown in the following figure:

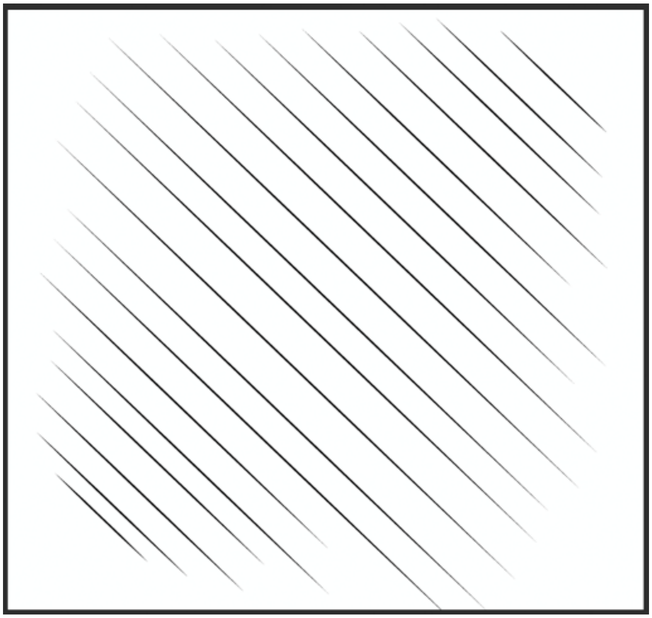


Figure 9.30 – Screenshot of lines drawn by snapping to the ruler

8. Turn off or delete any **Paper** color layers or any fill layers behind the parallel line layer, leaving only the group of lines and a transparent background.
9. Before we can set the new brush tip material, we must clear the parallel line ruler. To do this, select the **Object** sub tool from the **Operation** category of tools. Click on the ruler to select it. Then, click on **Edit** | **Delete** from the **File** menu. (You can also right-click and select **Clear** from the pop-up menu.)

10. In the **File** menu, click on **Edit | Register Material | Image...**. This path is shown in the following screenshot:

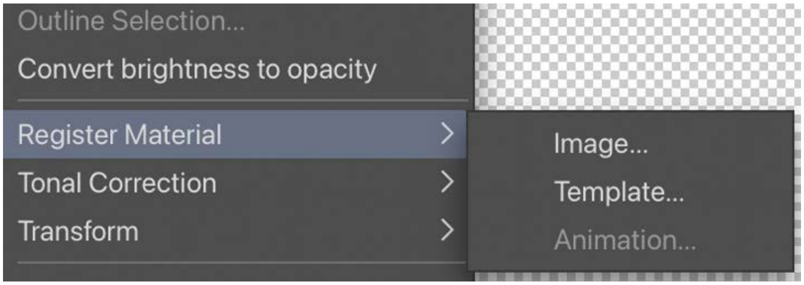


Figure 9.31 – Screenshot of the Register Material menu

11. This will bring up the **Material property** window. Enter a **Material name** value that is descriptive and unique. **Material image** shows us a preview of the shape we are saving. Check this to ensure that there is nothing else showing that we don't want to have in our brush shape.
12. Click on the checkbox next to **Use for brush tip shape**. Then, select the **Brush** sub-folder under the **Image material** folder to store the material in.
13. Finally, enter a few tags by clicking on the + icon at the bottom of the **Search tag** window. This will allow us to search for our material easily when we go to make our tool. Your **Material property** window should look similar to the following screenshot:

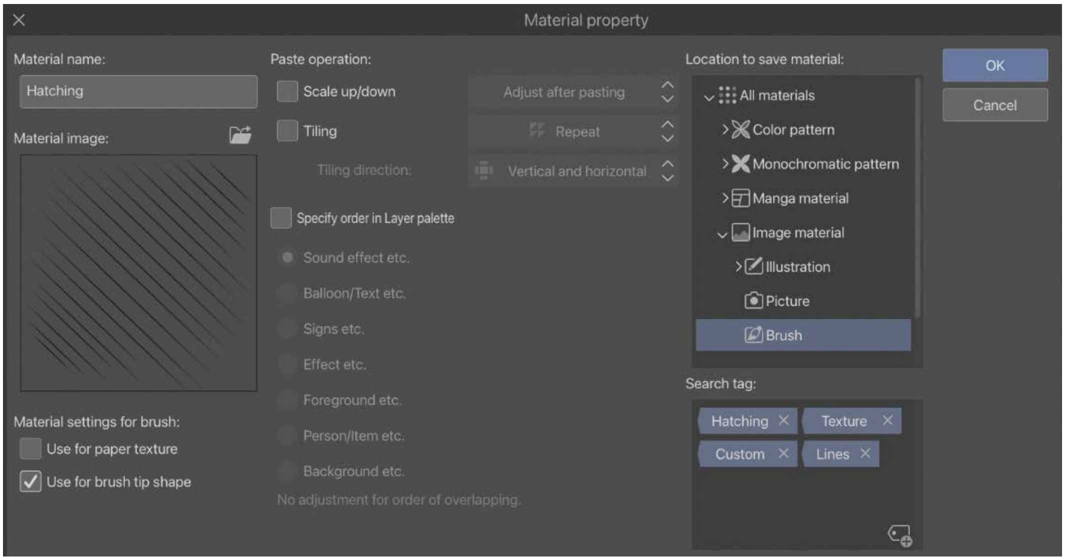


Figure 9.32 – Screenshot of the Material property window

14. Click **OK** to register the material.
15. Copy the G-pen, as we have in the other sections of this chapter. Name this new tool `Cross-hatching`.
16. In the **Tool property** palette, click on the wrench icon in the bottom-right corner to open the **Sub Tool Detail** palette.
17. Click on the **Brush tip** option.
18. Click on the **Material** button under the **Tip Shape** option. The box beneath **Tip Shape** will now say **Click here to add tip shape**. Click on this box to bring up the **Select brush tip shape** window.
19. Search for and select the brush tip shape created earlier in this section.
20. Click on the icon to the right of the **Angle** settings to open the **Angle Dynamics** window.
21. Click on the circle button next to **Direction of line** to activate this option. This option will set the direction of the brush tip material, depending on the direction we move the stylus in to make our line, allowing us to overlap the hatching to get cross-hatching lines.
22. Under the **Stroke** category of options, set **Gap** to **Fixed**.
23. Test your new tool!



Figure 9.33 – Screenshot of the cross-hatching brush effect in use

Because we created the brush material in a **Gray** color mode canvas, it means that we can set the color of the brush as needed. This can be seen in the preceding figure with the white highlight cross-hatching on the left side of the face, the hair, the shoulder, and the tip of the newspaper.

You can now apply textured shade and light to your artwork!

Summary

This chapter has given us a foundation for making our own custom tools, and with this knowledge, you should be able to make pretty much any special brush that you can dream up! We learned how to make and save our own custom materials that can be used as brush tips. We created a grittily textured inking brush and learned how to set the **Sub Tool Detail** settings to get the look we wanted. We made a glass shard brush that utilized **Opacity** and a **Random** direction to give us the appearance of hundreds of hand-inked glass shards in an illustration. Then, we used the **Ribbon** options to create a foliage brush. Finally, we used the parallel line ruler to create a brush tip material and used the **Direction of line** brush option to create a layered cross-hatching brush.

In the next chapter, we are going to move on to how to use vector layers and the **Material** palette. We will have a closer look at how vector layers are different from raster layers and make best use of the **Material** palette.

10
Vector Layers and the Material Palette

One of the benefits of using Clip Studio Paint is that it is capable of producing both raster and vector images. In fact, rasters and vectors can be used on different layers of the same canvas by simply creating the corresponding layer type. Creating vectors in Clip Studio Paint, however, is different in many ways compared to other vector programs.

Vector images are different from raster images. Raster images are made up of small squares of color, called pixels. Raster images are used in many situations, but they do have some disadvantages – primarily that since they are composed of pixels, they lose quality when made larger. Vector images are made of points that are connected together in the program, and can be edited on the fly and resized at will without any loss in quality.

In this chapter, we will learn about both how to create vectors in Clip Studio Paint and how to save artwork to the Material palette for use again later. The following topics will be covered:

- Creating a vector layer
- Drawing on vector layers
- Editing vectors
- Saving art to the Material palette

By the end of this chapter, the readers will know how to deal with vector line drawing, and will have gained knowledge of using materials.

Let's get started with vectors!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and a new canvas opened with a white-colored paper layer. Any size is fine, but I recommend creating a 300-dpi square canvas with which to work through the content in this chapter.

Vectors in Clip Studio Paint

In this section, we will start by learning about vectors, so don't worry if you are new to the term. We will start with what it's all about, and then you will try creating some vector art with our step-by-step tutorials.

Vector images are made from points, lines, and curves that are based on mathematical expressions. Because these images are defined by mathematical expressions instead of pixels, they can be scaled up or down infinitely without losing quality or becoming pixelated.

Vectors are most often used for logos, but they can be useful for creating comics as well as illustrations. The lines can be adjusted without being redrawn, so if you have trouble confidently making lines for inking, then working with vectors may be a solution for you.

Some graphics software will only work with either vector or raster information. Clip Studio Paint can do both, even within the same image file. We can have one layer of the image filled with vector information while all the others are filled with raster information if that's the way we want to do our work!

> **Important note**
>
> It's worth noting here that if you are already familiar with working in vectors in another program, you may need to adjust to the way that Clip Studio Paint handles vector graphics. Also, Clip Studio Paint's vectors are not exportable from the program as vectors, and vector graphics from other programs cannot be imported as vectors into Clip Studio Paint.

Let's get into creating your vector art!

Creating a vector layer

To start working with vectors, we need to create a vector layer. There are two ways to do this: through the **File** menu or through the **Layer palette**. We will see these methods in the following sections.

Creating a vector layer via the File menu

Follow these steps to create a vector layer using the **File** menu:

1. In the **File** menu, click on **File**, then go to **New Layer**, and finally click on **Vector Layer**.
2. Enter a name for the layer in the **New vector Layer** dialog box that appears.
3. Choose an **Expression Color** (Black and White, Gray, or Color) from the drop-down menu in the **New vector Layer** dialog box.
4. If applicable, choose a **Blending mode** from the drop-down menu.
5. Click on **OK** to create the new layer.

We will see how to create a vector layer from the Layer palette in the next section.

Creating a vector layer via the Layer palette

Follow these steps to create a vector layer using the **Layer** palette:

1. Locate the Layer palette in the user interface.
2. Click on the **new vector layer** icon in the **Layer** palette. The icon looks as shown in the following screenshot:

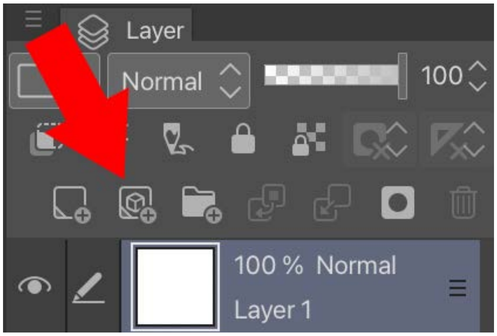


Figure 10.1 – Screenshot of the Layer palette

3. The new layer will be created and will show up in the layer stack in the palette.

Anything drawn on a vector layer will be a vector image, meaning that it is not made up of pixels, but of control points. Now we know two methods for creating a vector layer. They can be created either from the **File** menu, or from the **Layer** palette. The second method is definitely easier since it's just a click on an icon!

In the next section, we will learn how to draw on a vector layer with our favorite tools.

Drawing on vector layers

Once you have created a vector layer, you can use any tool that you'd like to draw on it, including pencils, pens, or the direct drawing tools (line, curve, ellipse, and so on).

Some editing may be needed to create a smooth line, and we prefer a line with the fewest control points possible to make it easier to edit the line.

Let's look at two similar vector lines, as shown in the following screenshot:

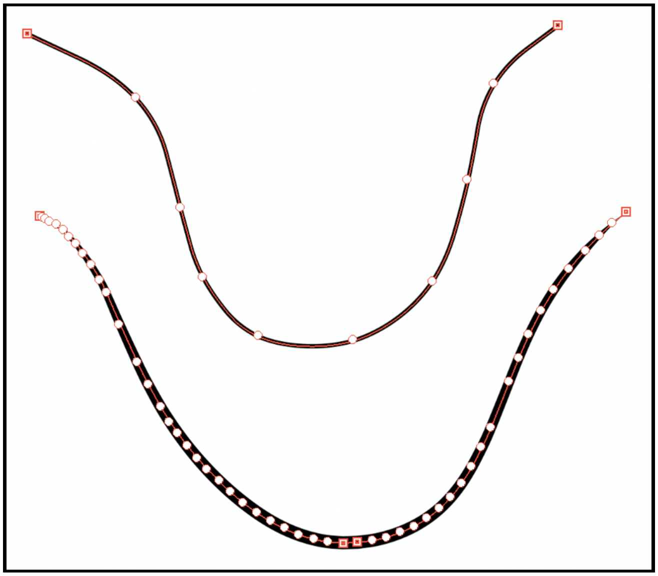


Figure 10.2 – Two vector lines

The line on the top was created using the Continuous Curve tool. The line on the bottom was created using the Pen tool. The small circles shown along the center of each line are the control points that are used for editing vector lines. On the line that was created with the Continuous Curve tool, ten control points are shown: one at the beginning of the line, and eight at each point where the curve changes direction.

The line created by drawing a curve with the Pen tool has many more control points because Clip Studio Paint automatically places them wherever the program thinks they may be needed. This makes editing the vector lines more difficult without some extra work beforehand.

Thankfully, Clip Studio Paint provides us with tools to make the cleanup process easier, which is exactly what we'll explore in the next section.

Editing vectors

In this section, we are going to look at different ways to edit vector lines. First of all, we will get to know editing tools, then we will try out some tools on the vector lines that we created in the previous section. Finally, we will learn how to change line widths.

One of the advantages of using vector graphics is that lines can be tweaked and edited endlessly until they are perfect, unlike working with raster layers, where a line must be erased and redrawn until it's just right. Vector lines can be manipulated and reshaped using their control points.

Clip Studio Paint has tools that allow for the easy cleanup and editing of vector lines. These tools can be found in the **Correct line** group of tools, as shown in the following screenshot:

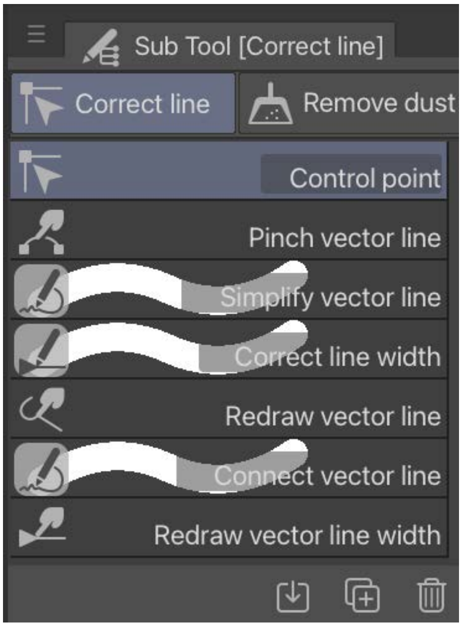


Figure 10.3 – Screenshot of the Correct line sub-tool options

Let's take a closer look at some of these **Correct line** tools, what they do, and how we can use them.

Using the Pinch vector line tool

I think it's best to talk about this tool first, because using **Pinch vector line** is an easy way to make a small change to the line position. Click on this tool, then click on the line you want to move, and drag it around to the desired place. As you can see in the **Pinch vector line** icon, it shows a human hand pinching a line, and it is that easy! If you only need to make a small tweak, this tool is the one you need!

The following screenshot shows the options for this tool:

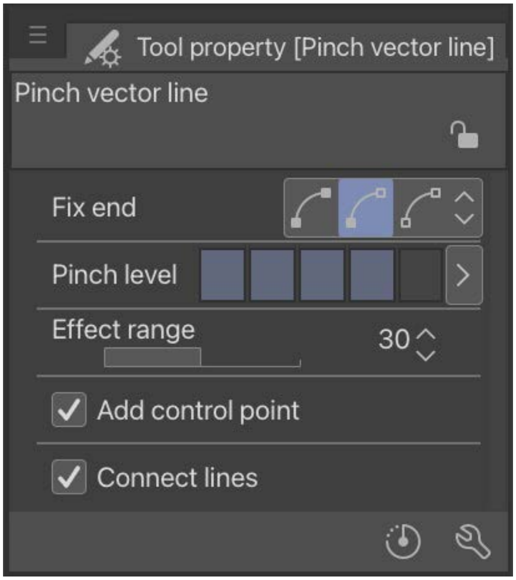


Figure 10.4 – Screenshot of the Pinch vector line sub-tool settings

The settings of the **Pinch vector line** tool options are described as follows:

- **Fix end**: This sets which ends of the pinched line to edit. If you select the **Fix one end** option as highlighted in the preceding screenshot, you can move one end of the line but not the other.
- **Pinch level**: This option adjusts how much the line bends when editing with this tool. Bigger values pinch the whole line while smaller values pinch a smaller part of the line.

- **Effect range**: This changes how wide the line moves when you drag along the line. The larger the value, the more the part of the line is moved at once.
- **Add control point**: When activated, this automatically adds control points as you bend a line, so that the parts without control points are not dragged along as you edit. When it's not activated, a whole line will be dragged as it is, so the drawing shape might be distorted.
- **Connect lines**: When activated, if you pinch one line and move it to touch the end of another line, these lines will be connected. You won't be able to activate this if you selected the **Fix both ends** option in the **Fix end** setting.

Now you know how to control the pinch tool so you can adjust your vector lines as you please using this tool! We will now look at some different ways of editing vectors in the next section.

Using the Control point tool

The **Control point** sub-tool can be used to perform various actions on the control points along a vector line. These functions can be accessed via the **Sub-tool Property** palette when the **Control point** sub-tool is selected. The following screenshot shows the **Sub-tool Property** palette:

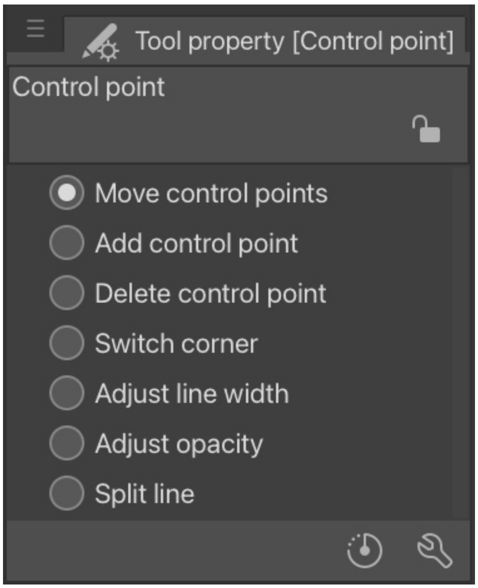


Figure 10.5 – Screenshot of the Control point sub-tool property palette

The different modes of the **Control point** tool are described as follows:

- **Move control points**: Allows the control point to be moved by clicking and dragging.
- **Add control point**: Adds a control point by clicking on the vector line at the point where the additional control point should be placed.
- **Delete control point**: Deletes control points with a click of the mouse or stylus.
- **Switch corner**: Switches the corner of the control point. Control points can be hard corners or curves, and using this tool will change a hard corner on a vector line into a curve, and vice versa.
- **Adjust line width**: Easily manipulate the width of the vector line by clicking and dragging to the right or left on a control point. Dragging in either direction will either make the line thinner or thicker at that control point.
- **Adjust opacity**: This is similar to the **Correct line width** option, and allows us to change the opacity of the line at the control point by clicking and dragging.
- **Split line**: Separates the vector line at the point where the tool is clicked.

By switching back and forth between these options, you get a great level of control for manipulating your vector lines! But aren't there too many control points? We will see how to simplify this in the following section.

Using the Simplify vector line tool

This is the tool that I use the most when creating vector graphics in Clip Studio Paint. I love the look of hand-inked lines for most of my art, especially lines that go from thin to thick and back again, like they were made using a traditional brush pen. However, as seen in the *Drawing on vector layers* section of this chapter, using the drawing tools on a vector layer produces a line with an abundance of control points, making editing the line difficult.

The **Simplify vector line** tool can be used to reduce the number of control points in a hand-drawn line to only the points needed. The line in the following screenshot has had the **Simplify vector line** tool used on the left-hand side, while the right still has the control points that were created automatically:

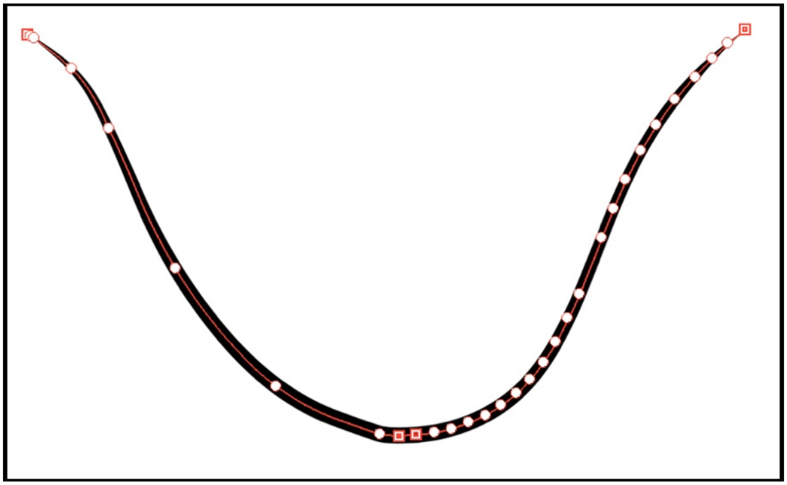


Figure 10.6 – Screenshot of a half-simplified line

Notice how close together the control points are on the right side of the curve compared to the control points on the left. This is because Clip Studio Paint puts too many control points along vector lines when they are drawn with a pen or a brush tool.

Using the **Simplify vector line** tool is easy. Simply select the tool, set the brush size, and then click and drag it over the areas of the vector line that need to be simplified. A green highlight shows where you've already used the tool during that stroke. When the mouse button is released, the program will simplify the line automatically.

Note that after using this tool, some control points may need slight tweaking for accuracy. Now your vector line looks simplified and more manageable. Let's move on to learn how to change line width.

Using the Correct line width tool

The **Correct line width** sub tool under the **Correct line** group allows for a vector's line width to be changed in an instant. This is only one of the tools that allows us to change the width of the line. Let's take a look at the **Correct line width** sub-tool properties, which are shown in the following screenshot:

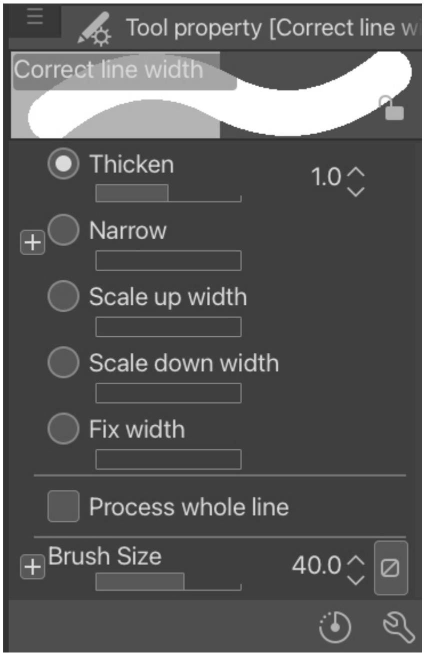


Figure 10.7 – Screenshot of Correct line width sub-tool property

The white circle to the left of the option name indicates which operation is currently active. **Thicken** will make the vector line thicker, depending on what value the slider is currently on and where the tool is used. The **Narrow** option does the opposite, making the vector line thinner. **Scale up width** and **Scale down width** make the line thicker and narrower by scaling it up or down, according to the value set under those options. This means if you input `2` in the **Scale up width** value, the part of the vector line where the tool is used will become two times thicker. The line in the following screenshot had various parts of it thickened and thinned using this tool:

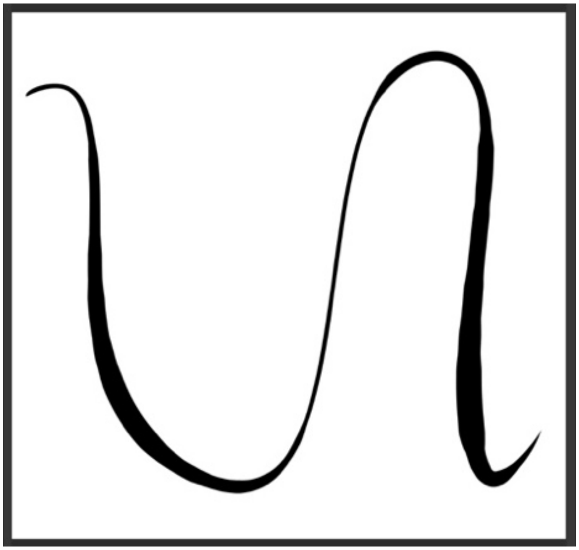


Figure 10.8 – Screenshot of a drawing with line width corrected

The **Fix width** option will set any part of the line the tool is used on to the width indicated by the slider, no matter how thick or thin it is before being used.

The **Process whole line** checkbox will complete the indicated action on the entire vector line at once. This can be a great time saver when wanting to make an entire line thicker or narrower, because one click anywhere along the line will change the whole line at once, instead of us needing to select the entire line with the tool!

The **Brush size** slider controls the size of the cursor of the **Correct line width** tool.

Using the Redraw vector line tool

The **Redraw vector line** sub-tool is pretty neat because it allows you to push and pull the vector line around as you like. Simply select the tool, click somewhere along a vector line, and drag it around to change the line. It's an easy way to adjust vector lines quickly and organically without having to completely redraw them!

Using the Redraw vector line width tool

The **Redraw vector line width** sub-tool is another method of adjusting the thickness or thinness of our vector lines after they've been created. Honestly, this is the tool I tend to use the most when needing to adjust vector line thickness, simply because it is much more visual than the **Correct line width** tool. The **Redraw vector line width** sub-tool uses the **Brush Size** setting to adjust the thickness of the line. The larger the brush size is set, the thicker the tool will make the parts of the line it is used on. When the brush is set to a size smaller than the current line, the tool will make the line narrower. In the following screenshot, this tool was used with varying size settings along the length of the line:

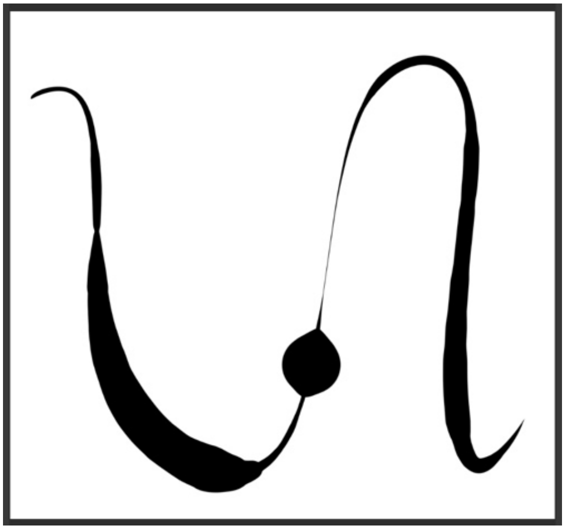


Figure 10.9 – Screenshot of a drawing edited with the Redraw line width tool

Whatever size the brush was set to is the size that the line becomes after the tool is used. The large blob in the center of the line was created by making the brush size much, much larger than the current width. This was done by clicking the tool just once in that section of the line.

That's how we can change the width of lines to suit your needs. We will look at how to make two separate vector lines connect in the following section, so let's read on.

Using the Connect vector line tool

If you see that there's a gap between two vector lines that you want to fill, this is the tool for you. You only need to stroke the tool over the line gap and it will be filled automatically! As with the other tools, there are several settings available for this tool as you can see in the following screenshot:

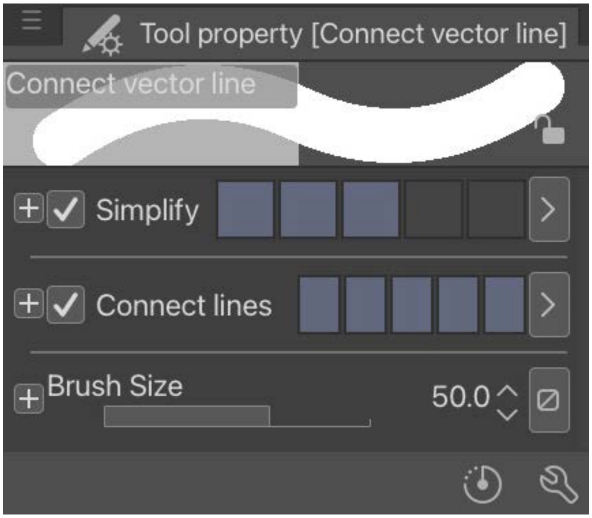


Figure 10.10 – Screenshot of the Connect vector sub-tool properties

Let's have a look at each of these settings in the sub-tool properties:

- **Simplify**: Reduces the number of control points in the area where you stroke to connect the lines. As you can see in the following screenshot, a smaller value makes the lines connect with a more complicated shape, and a larger value makes the connection with a simpler shape:

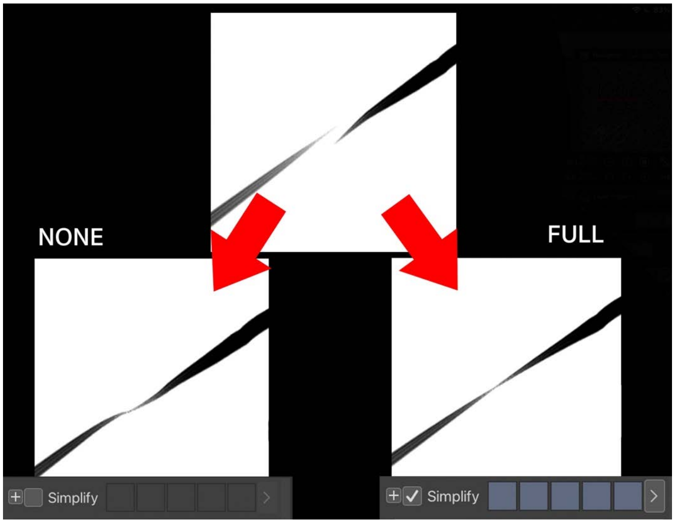


Figure 10.11 – Screenshot of the Connect vector sub-tool's Simplify property

- **Connect lines**: This option, when activated, connects overlapping lines into a single one. The larger the value, the more lines can be connected. Be careful not to set this value too high, otherwise some unintended connections might happen.
- **Brush Size**: This sets the size of brush.

Phew, seems like that was a lot of options to take in! But you can now move, add, erase, and simplify control points, and you can even change line width without having to redraw the line again and again. Because they're vectors, your lines also won't lose quality when you increase the size of the canvas. So now you're familiar with the Pinch vector line, Control point, Correct line width, Redraw vector line, Connect vector line, and Redraw vector line width tools, and know how they work!

Did you make a mistake or just want to hide parts of a vector line? No problem, read on to find how to erase vector line.

Using the Vector eraser tool

Back in *Chapter 6*, *Erasers, Selections, and the Sub View Palette*, I mentioned that we would talk about the **Vector eraser** in a later chapter. Now, that time has arrived!

The **Vector eraser** can be used just like a regular eraser, but it also has some settings that turn it into an incredible time-saving device when working with vectors. Let's take a closer look at these settings now, as shown in the following screenshot:

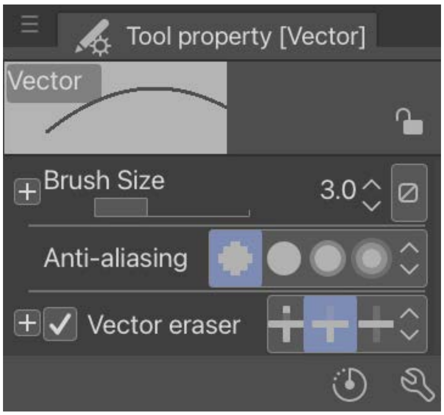


Figure 10.12 – Screenshot of the Vector eraser tool properties

Take special note of the **Vector eraser** section of the **Tool property palette**. This special setting is what makes the **Vector eraser** tool so special among the other eraser tools. In the preceding screenshot, we can see three icons, each accompanied with a black and blue + sign. These icons are **Erase touched area**, **Erase up to intersection**, and **Overall line**. To illustrate what each of these settings does, a simple grid of straight lines on a vector layer will assist us.

The **Erase touched area** option will erase only what is gone over with the tool, just like any of the other eraser tools will do normally. In the following screenshot, this setting was used, and then a stroke was taken down through the grid of lines with it. Only the sections of the lines that the tool passed through were erased:

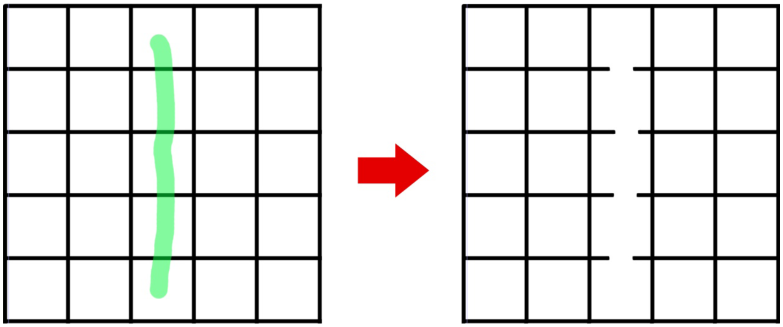


Figure 10.13 – Screenshot of Erase touching part action

Using the **Erase up to intersection** option allows us to clean up a grid of lines quickly and easily. This setting will erase the vector line up to the point where it intersects with another vector line. In the following screenshot, it was used to make one stroke down through the third column of the grid. Note that, unlike the previous option, all of the horizontal lines from that section have disappeared, despite the fact that the tool only moved through the center of the lines in the column:

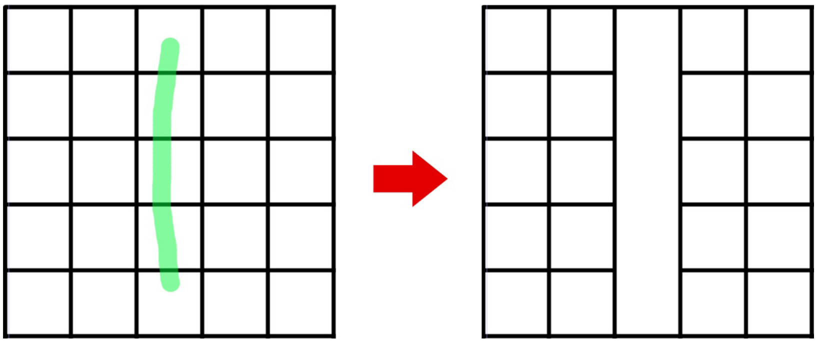


Figure 10.14 – Screenshot of an action with Erase up to intersection

This setting can be used to quickly clean up the edges of the grid in the preceding screenshot. One swipe around the edges of the grid of squares, and stray lines are erased entirely, up to where they intersect with other vector lines, as shown in the following screenshot:

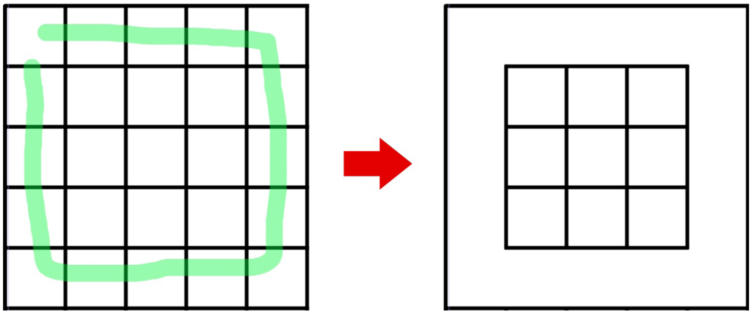


Figure 10.15 – Screenshot of another action with Erase up to intersection

Instead of tediously erasing the ends of the lines and trying desperately to get them perfect, the **Erase up to intersection** tool does it for you with one stroke!

The **Overall line** setting will erase the entirety of the vector line that is clicked on, no matter how small of a brush size the eraser tool is set to. In the following screenshot, this setting was used on two horizontal grid lines to make a set of rectangles instead of squares:

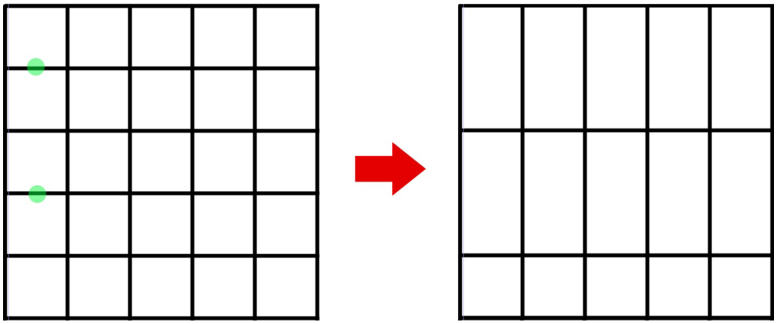


Figure 10.16 – Screenshot of the Overall line action

Tip

Need to draw windows on the side of a building quickly? Create a vector layer. Draw a grid of vector lines in perspective with the building, then use the vector eraser to quickly clean up the edges of the grid and put spaces between the windows with the Erase up to intersection setting!

Aren't these options useful? They will save a lot of your precious time in making your drawings look neat.

Let's move on to how to save your precious art to use again later. It's like a drawer in an art studio, keeping art materials for later use again and again, whenever you need them!

Exploring the Material palette

Did you know we can save your art to the **Material** palette for later use as patterns, designs, backgrounds, and more? It certainly is one of the most useful techniques to have in digital drawing!

In this section, we are going to take a design and save it to the **Material** palette so that it can be used as a design on a character's shirt. First, though, let's take a look at the **Material** palette categories, which are shown in the following screenshot:

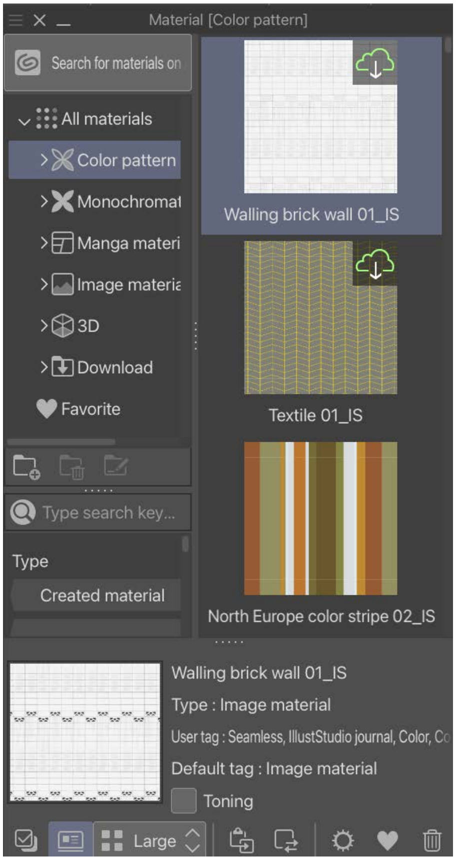


Figure 10.17 – Screenshot of the Material palette

On the left-hand side of the palette is a list of the different categories of materials. These are **Color pattern**, **Monochromatic pattern**, **Manga material**, **Image material**, **3D**, **Download**, and **Favorite**. The following is a description of each of these categories:

- **Color pattern** contains patterns and background assets that are in color. Most of these assets are seamless tiles, but not all of them. They are separated into subcategories according to type.
- **Monochromatic pattern** is for black and white patterns, backgrounds, and textures. Included in this category are many different types of screentone patterns for manga creation.
- **Manga material** contains assets such as framing templates for comic page creation, speech balloons, sound effects, and effect lines.
- **Image material** contains illustrations and photo assets, along with brush tip material assets as well.
- **3D** contains all 3D assets. For more information on 3D materials, see *Chapter 14*, *Using 3D Figures and Objects*.
- **Download** contains any assets downloaded from the Clip Studio Paint App. For more information on downloading new materials, see *Chapter 18*, *Exploring the Clip Studio Assets and Animation*.
- **Favorite** contains any materials you add to the Favorite category by pressing the heart-shaped icon at the bottom of the palette when a particular material is selected. It's a good idea to favorite any frequently used materials.

Now that we know about the different types of assets in the **Material** palette, we should learn how to save our own artwork to the palette as well. Let's see how to do that in the next section.

Saving artwork to the Material palette

There are many reasons why we might want to save a piece of art to the **Material** palette. Perhaps it's the title logo for your comic series and you want to be able to easily add it to your covers. Maybe it's a watermark that you intend to put over any image that you post online to deter art theft. Maybe it's a special speech balloon you designed for the villain of your manga, or it's a special repeating plaid pattern for your protagonist's outfit. You can also lay out complex tattoos and save them to the **Material** palette so that you can use them again instead of drawing them over and over every time you draw the character. Alternatively, you can create a T-shirt design for a character and simply paste it in and edit it slightly to fit the angle your character is standing at instead of redrawing the design each time!

The possibilities with materials are limited only by your own imagination, and the preceding points are just a few ideas of ways to use them.

The artwork in the following screenshot is going to be the artwork that will be used for the instructions that follow on how to save your own art assets to the **Material** palette:



Figure 10.18 – Screenshot of a design

I have left the design with a transparent background because it will be used for a character's clothing in another creation, so that later I will be able to change the color of the clothing by isolating the design itself from the selection.

The following steps will walk us through the process of saving an image to the **Material** palette:

1. If your image is made of multiple layers, either flatten the image or go to **[Layer] menu | Merge visible to new layer** to create a new layer with a copy of the layers on it. Only the contents of the currently active layer will be saved to the **Material** palette, so be sure that all of the parts of the image that are going to be saved are on the same layer and that this layer is selected before continuing.
2. In the **File** menu, click on **Edit** and then go to **Register Material** and click on **Image**.

3. The **Material property** window will appear, as shown in the following screenshot:

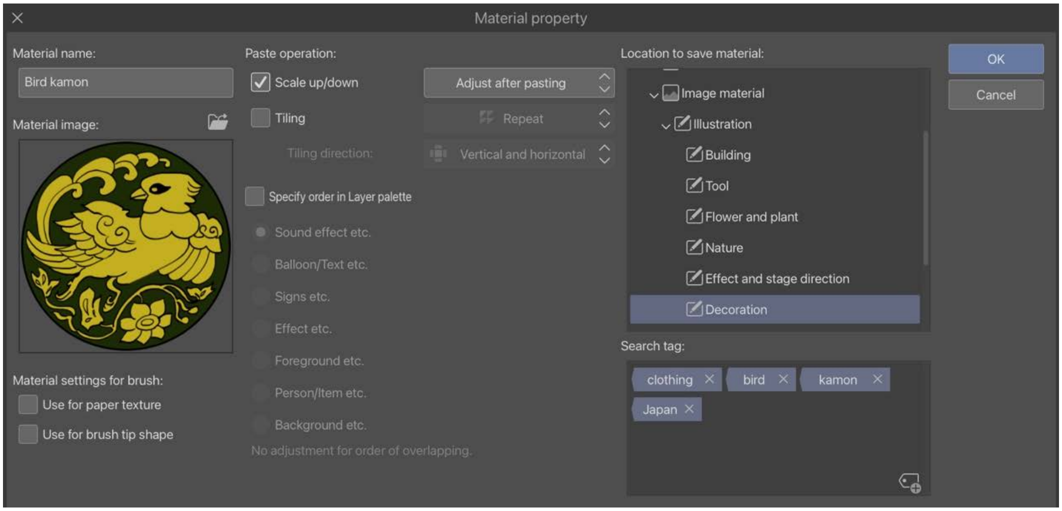


Figure 10.19 – Screenshot of the Material property window

4. Enter a name in the **Material name** text entry box.
5. The **Material image** box will show a preview of the image that is being saved. If this image isn't correct, click on the **Cancel** button and follow the instructions in *step 1* to ensure that your image is all on one layer.
6. Under **Paste operation**, make sure that the **Scale up/down** option is checked, and that **Adjust after pasting** is selected in the drop-down menu. This will allow us to resize the material after adding it to the canvas.

   The **Specify order in Layer palette** setting allows us to choose where in the stack of layers the material will be added. For instance, if we were adding a background image, we could select **Background etc**. option so that the image will always be pasted beneath the other layers in the stack. Since we are creating a clothing design for this example, we will select **Effect etc**. so that the design will appear over the top of the characters.
7. Choose the desired category to save the **Material** under in the **Location to save material** window. In this example, we are using the **Image Material | Illustration | Decoration** folder to save this design.

8. Click on the icon in the lower right corner of the **Search tag** box to add tags to the **Material**. I always recommend using a unique tag on any materials you create and save so that you can find all of your assets quickly. I used the tag `clothing`, but you can come up with your own name, or maybe even the name of your comic project if that is what you want!
9. Click on **OK** to complete saving the design to the palette.

Once our image is saved, we can view it in the **Material** palette. In the following screenshot, the **Bird kamon** design I saved by following the preceding instructions is shown under **All materials** at the top of the list, since it has just been added:

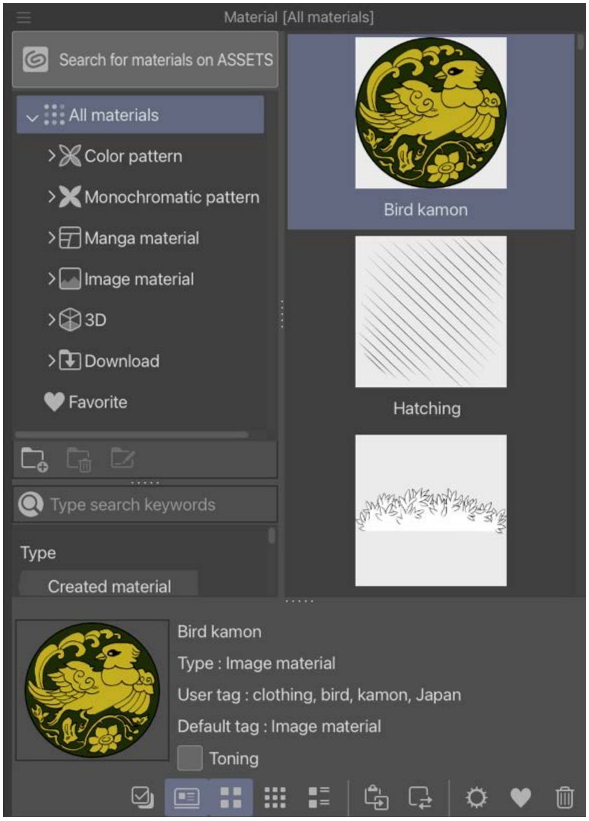


Figure 10.20 – Screenshot of the Material palette

By selecting the material and clicking on the **Paste selected material to canvas** icon at the bottom of the **Material** palette, the material will be added to the currently active canvas. The **Paste selected material to canvas** icon looks like the following screenshot:

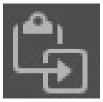


Figure 10.21 – Screenshot of the Paste selected material to canvas icon

In the following screenshot, the design has been added to the character's clothing, so now you don't need to redraw the image over and over again in every scene where the same character appears in your manga!



Figure 10.22 – Screenshot of pasted material

I'm sure you have a variety of designs you would like to use in your manga, and now you know how to store and use them without going through the hassle of creating them again and again!

> **Tip**
>
> This tip will save you a lot of time! Create a panel layer folder that contains: a page full of panels before being divided into shapes, layers with speech balloon samples for each of the fonts used in your manga, a sketch layer, and an ink layer. Then click the folder and drag it into the **Material** palette where your desired category is already open. This can be used for the following pages as you continue to draw the manga series, and you don't have to recreate the set over again anymore. On each new manga page, just click on the **Paste selected material to canvas** icon! Now all you need to do is to edit them without creating them from scratch.

Summary

In this chapter, we started off by getting familiar with vectors. We learned what a vector is and how vectors in Clip Studio Paint differ from vectors in other programs. We learned how to create a vector layer and how to draw on it with both the direct drawing tools and the brush tools. Then, we learned about the different tools we can use to fine-tune our vector drawings. Finally, we learned how to save our art to the **Material** palette for use in other creations.

You now know how to use raster and vector layers and the **Material** palette. Did you know that you can also create your own sound effects in Clip Studio? In the next chapter, we'll learn about editing, modifying, coloring, and wrapping up text, while also getting creative by adding sound effects.

11
Creating Your Own Sound Effects

Making sound effects for manga is an art form in and of itself. It takes a lot of work and skill to turn sound into text! The letters that you choose to represent a sound are important, but so are the font, the colors, and even whether or not you choose to distort those letters for emphasis.

In this chapter, we will cover the following topics:

- Adding Sound effects in speech balloons and how to group sound effect layers
- Using fonts for sound effects by adding color and lines to fonts
- Hand lettering and Using the Mesh Transform tool to wrap text
- Making eye-grabbing titles

Use your skills of handling fonts, adding color, adding effects, distorting into the shape you desire with the Mesh Transform tool, and hand lettering to create the most dramatic sound effects and titles for your manga.

Let's dive right into these tools!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and a new canvas opened with a white paper layer. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

Adding sound effects in speech balloons

You can handle some sound effects in a similar way to dialog speech balloons. Just create the balloon shape and it will contain sound effects instead of dialog. You can apply this for popping, beeping, whispering, and shouting sounds. You can find out more about speech balloons in *Chapter 7*, *Using Text and Balloon Tools*.

Follow these steps to create a sound effect with a balloon:

1. Open a canvas and sketch your idea of a sound balloon with any drawing tool.
2. Click the **Layer color** icon in the **Layer Property** palette to turn the sketch color to blue.
3. Create a new vector layer on top of the pencil drawing layer by clicking the **Create new vector layer** icon, select the **Felt pen** sub tool from the **Marker** tool group, and trace your sound effect text in the vector layer as in the following screenshot:



Figure 11.1 – Screenshot of the handwritten sound

4. Since it's on a vector layer, you can correct the text to the exact shape you want by using **Correct line** tools. For more details on vector line editing, go to *Chapter 10*, *Vector Layers and the Material Palette*. In the following screenshot, the control points of the line stroke are visible for correcting:

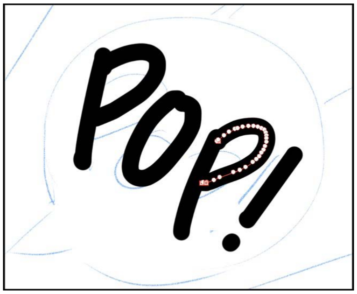


Figure 11.2 – Screenshot of control points on the vector image

5. Once you're satisfied with the shape of the sound text, select the **Ellipse balloon** sub tool from the **Text** tool group, then click on the canvas and drag to create a balloon that is big enough to cover all the text. Do not panic if the balloon hides the text – you can always move the balloon layer underneath the text layer after creating the balloon.

6. Select the **Balloon tail** sub tool from the **Text** tool group, click on the canvas, then drag your mouse or stylus to get the desired size for your balloon tail. You can always resize and adjust the position of the text, the balloon, and the balloon tail using the **Object** sub tool from the **Operation** tool group. Try rotating the tail to aim it in a direction where the edge of the tail is pointing at the object that is the source of the sound. The following screenshot shows a control handle and points for correction, which appear when you click on the canvas with the **Object** sub tool:

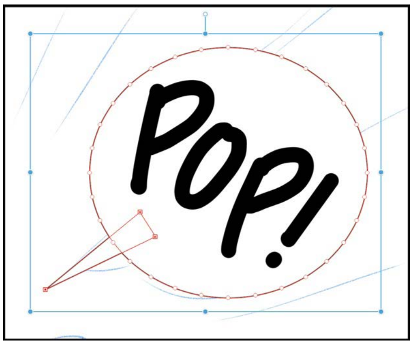


Figure 11.3 – Screenshot of the control handle and points

This is a very easy and effective way to add sound effects. You can apply the method for various other sounds too. But you might have noticed that you have too many layers for dialogs and sound effects in your **Layer** palette. You can organize them before losing the important sound effects layer in the chaos.

Grouping layers of sound effects and speech balloons

There are ways to organize your cluttered **Layer** palette. They are using a layer folder to group them, giving them a unique name, and adding color marks to a layer.

Follow these steps to declutter your sound effect and speech balloon layers:

1. While pressing the *Shift* key, click on multiple layers to select them. In this tutorial, select the layer that contains the writing and the layer that contains the speech balloon you just made in the previous section.
2. In the **File** menu, Click **Layer | Create folder and insert layer**, as you can see in the following screenshot:

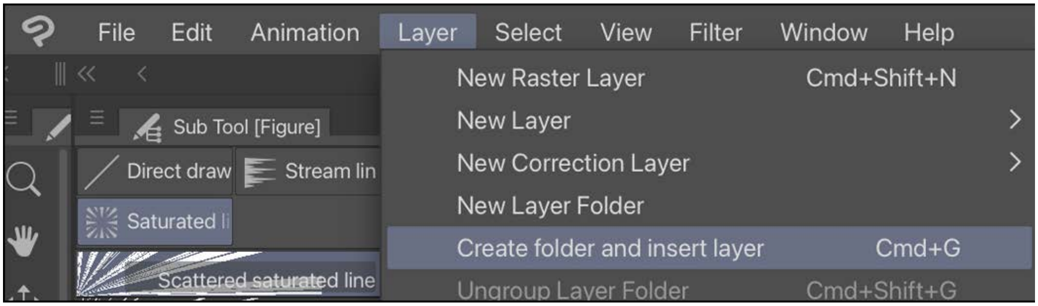


Figure 11.4 – Screenshot of the Layer drop-down menu

3. Now your selected layers are grouped in one folder in the **Layer** palette. Double-click on the folder name, which is currently displayed as **Folder 1**, then type a unique name for the folder. Press *Enter* to confirm the name.
4. With the folder you have just named still selected, click the square-shaped **Layer color** icon in the **Layer** palette. The color variation drop-down menu will be displayed as in the following screenshot:

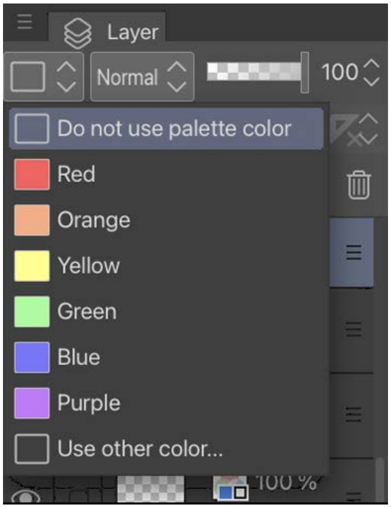


Figure 11.5 – Screenshot of the Layer color drop-down menu

5. Click on a color of your choice and the folder will automatically display a mark with the color on the **Layer** palette. You can repeat *steps 1-5* every time you create sound effects. You can group layer folders in the same way as you have done with other layers. The following screenshot shows a color-coordinated **Layer** palette:

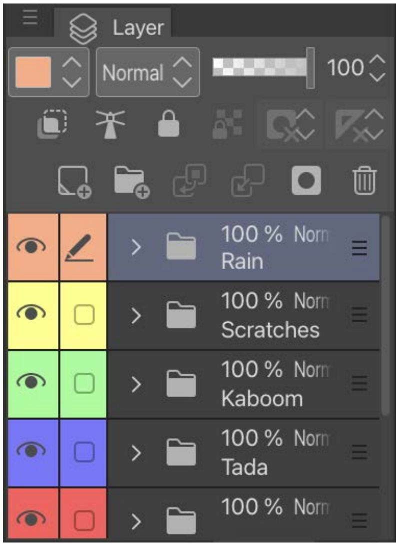


Figure 11.6 – Screenshot of colored layers in the Layer palette

Isn't your **Layer** palette much more organized and isn't it easy to find a particular layer at a glance? In this way, you can move layers that are combining similar sound effects together, but still be able to edit them separately.

You don't have to necessarily write the sound effect text yourself; there are huge amounts of ready-made fonts available. Read on to find out how to use them for sound effects.

Using fonts for sound effects

The easiest way to make sound effects is to use fonts, especially when you can't create sound effects exactly how you want yourself – when there should be more expressions and they should be professional-looking. Don't worry, there are tons of great fonts available on the website, and some of them are free to use! Many specialty fonts exist that are perfect for creating the feeling of explosions, cracking, gunfire, and more. Let's see how to add fonts.

> **Important note**
>
> Some great resources for these types of fonts are `www.blambot.com` and `www.1001freefonts.com`, but be sure to check the terms of use for any free font that you download! Some free font creators do not allow their fonts to be used in commercial projects, so if you're making a comic to sell, you need to be certain you are not breaking any copyright laws!

After downloading a new font and installing it on your computer, you may need to shut down Clip Studio Paint and restart the program in order to get the font to appear in the font list in the Text tool. Once it appears in the font list, you can use the instructions in *Chapter 7*, *Using Text and Balloon Tools*, to lay out your basic text.

If you love collecting new fonts for every occasion that you can think of, the font list can get a little confusing and overwhelming. It can take a lot of time to find that specific font you downloaded last February for just this specific panel you knew was coming up in your script!

This is when it's hard to change how the font list is displayed in Clip Studio Paint. Click on the **Font** drop-down menu in the **Tool property** panel when the Text tool is active. An example of the font list is shown in the following screenshot:



Figure 11.7 – Screenshot of the Font drop-down menu

At the bottom of the font list, on the left-hand side, there are three icons that control how the font list is displayed. The first icon is **Display font name**, and it shows the font list in the default font of Clip Studio Paint's user interface. The second icon is **Display font name in specific font**, which is the option shown in the preceding screenshot. Each font name is displayed in that particular font, making them easy to identify. The third icon is **Display text in specific font**, and it will use the currently selected text to display the font name. This is especially handy when doing sound effects because you can type out your letters and then see the way those letters will look in all the fonts that you have!

The following is an explosion sound effect that has been typed in the font Badaboom Pro BB:

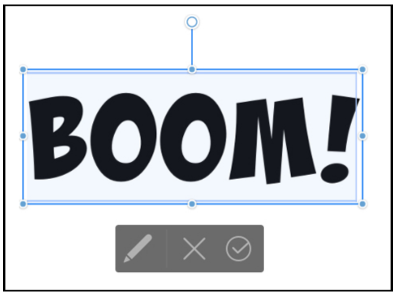


Figure 11.8 – Screenshot of text in the Badaboom Pro BB font

This is a perfectly acceptable sound effect for an explosion, but what if we want to really make it pop and add some color? Read on to find out how!

Adding outlines, gradients, and patterns to text

Now you know how to make your font appear in your font list, and you have text on your canvas, we can start manipulating text to make it closer to your visual requirements.

Of course, you can select a color other than black or white for your text while entering it, but what if you want to apply a gradient, a texture, or create an outline for the text to make it pop off the page? In this section, we'll cover those exact topics! All of these are easy effects to accomplish with just a few button clicks and some tricks in the **Layer** and **Layer Property** palettes.

Adding an outline

This technique works for anything on a layer that you may want to add an outline to, not just text. Here, we'll use our **BOOM!** sound effect as an example. It's very easy to create an outline in Clip Studio Paint using the **Layer Property** palette.

Follow these easy steps to add an outline to the contents of a layer. In this case, we're using a text-sound effect:

1. Ensure that your text layer is the currently active layer by checking that it is selected in the **Layer** palette.
2. Locate the **Layer Property** palette. If you cannot locate it, ensure that there is a check mark next to **Layer Property** in the **Window** menu.
3. In the **Layer Property** palette, locate the **Effect** section of settings. Click on the **Border effect** icon to show the options that are shown in the following screenshot:

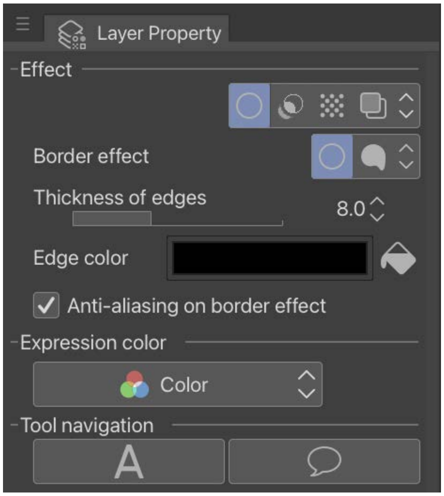


Figure 11.9 – Screenshot of the Layer Property palette

4. Use the slider or the arrows next to the **Thickness of edges** option to set the width of the outline.
5. Click on the box next to **Edge color** to set the color for the outline from the color picker.

The following is our sound effect from the previous section, with the font color set to white and with a black outline around it:

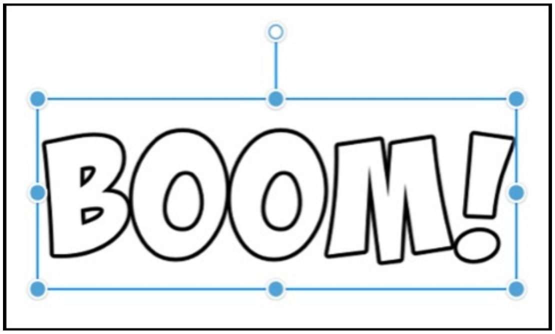


Figure 11.10 – Screenshot of text with an outline

Creating an outline with the **Border effect** options allows the outline to be edited later, so if you decide to make your outline a different color or to make the border thicker or thinner, simply select the layer again and change the settings in the **Layer Property** palette! There's no need to recreate your entire text layer from scratch!

Let's move on to using gradient color for your text.

Adding gradients to text with Lock Transparent Pixels

A great way to add a real punch to sound effects is to add a gradient. This can help your effect pop off the page when used correctly. Again, we can do this in just a few clicks! The following steps show you how to create a copy of a layer, rasterize it, and add a gradient:

1. Ensure that your text layer is active by locating it in the **Layer** palette and clicking on it to highlight it.
2. In the **File** menu, click on **Layer**, and then click on **Duplicate Layer** to create a copy of the text layer. Alternatively, you can also click on the layer in the **Layer** palette and drag it to the **New Layer** icon to create a copy of the layer. The **New Layer** icon looks like the following screenshot:



Figure 11.11 – Screenshot of the New Layer icon

3. Click on the eye-shaped icon of the original layer to make it invisible on the canvas. Select the copied layer, then click on **Layer** in the **File** menu, and then click on **Rasterize** to convert the layer to raster.
4. In the **Layer** palette, click on the icon labeled **Lock Transparent Pixels**. This will allow us to apply our effects only to the filled pixels in the layer. The **Layer** palette with the **Lock Transparent Pixels** icon selected is shown in the following screenshot:

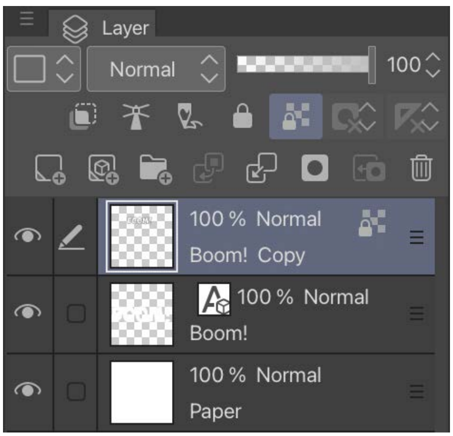


Figure 11.12 – Screenshot with the Lock Transparent Pixels icon selected

5. Select the **Gradient** category of tools in the toolbar, then select one of the **Gradient** sub tools. Click on the canvas and drag it to apply the gradient to the text.
6. In the **Layer Property** palette, add the **Border Effect** option to give an outline to your sound effect, if desired. In the following screenshot, the Clip Studio Paint **Sunset Glow** preset gradient was used to give the sound effect a fiery look, and then a black outline was added to make the sound effect stand out:



Figure 11.13 – Screenshot of text with a gradient effect

> **Tip**
> When a text layer is rasterized, it becomes pixels that cannot be edited with the Text tools. If you need to rasterize text to apply an effect, it is recommended that you make a copy of the text layer and rasterize the copy so that you can go back to the original text if changes need to be made.

Great, now you have added a color and an outline, and even a gradient effect to your text! The text appears so dramatic. You can even go further by adding patterns. Read on to learn how.

Using clipping layers to add patterns to text

For extra-special sound effects, you may want to add a pattern to your text to add emphasis. This is where clipping layers come in handy. A clipping layer is a layer that clips to the layer below it, only showing the contents of the top layer in places where the bottom layer has pixels filled in. Clipping layers are useful in all sorts of situations, but we'll create a striking sound effect in our example of how to use them.

Follow these steps to create a sound effect with a color pattern from the **Material palette** applied over it:

1. Ensure that your text layer is active by locating it in the **Layer** palette and clicking on it to highlight it.
2. In the **File** menu, click on **Layer**, and then click on **Duplicate Layer** to create a copy of the text layer. Alternatively, you can also click on the layer in the **Layer** palette and drag it to the **New Layer** icon to create a copy of the layer.

3. Click on the eye-shaped icon of the original layer to make it invisible on the canvas. Select the copied layer, then click on **Layer** in the **File** menu, and then click on **Rasterize** to convert the layer to raster.
4. Open the **Material** palette and select a pattern from the **Color Pattern** category to add to the text. For more information on using materials, see *Chapter 10, Vector Layers and the Material Palette*.
5. The pattern of the material may be pasted in a layer below the rasterized text layer. Click and drag the layer in the **Layer** palette to above the rasterized text layer. Your **Layer** palette should look something like what's shown in the following screenshot:

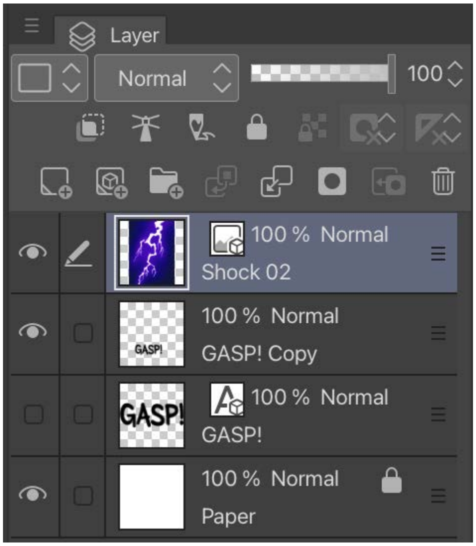


Figure 11.14 – Screenshot of the Layer palette

6. In the **File** menu, click on **Layer**, then go to **Layer Settings**, and click on **Clip to Layer Below**. Alternatively, you can right-click on the pattern layer in the **Layer** palette and go to **Layer Settings**, then click on **Clip to Layer Below**, as shown in the following screenshot:

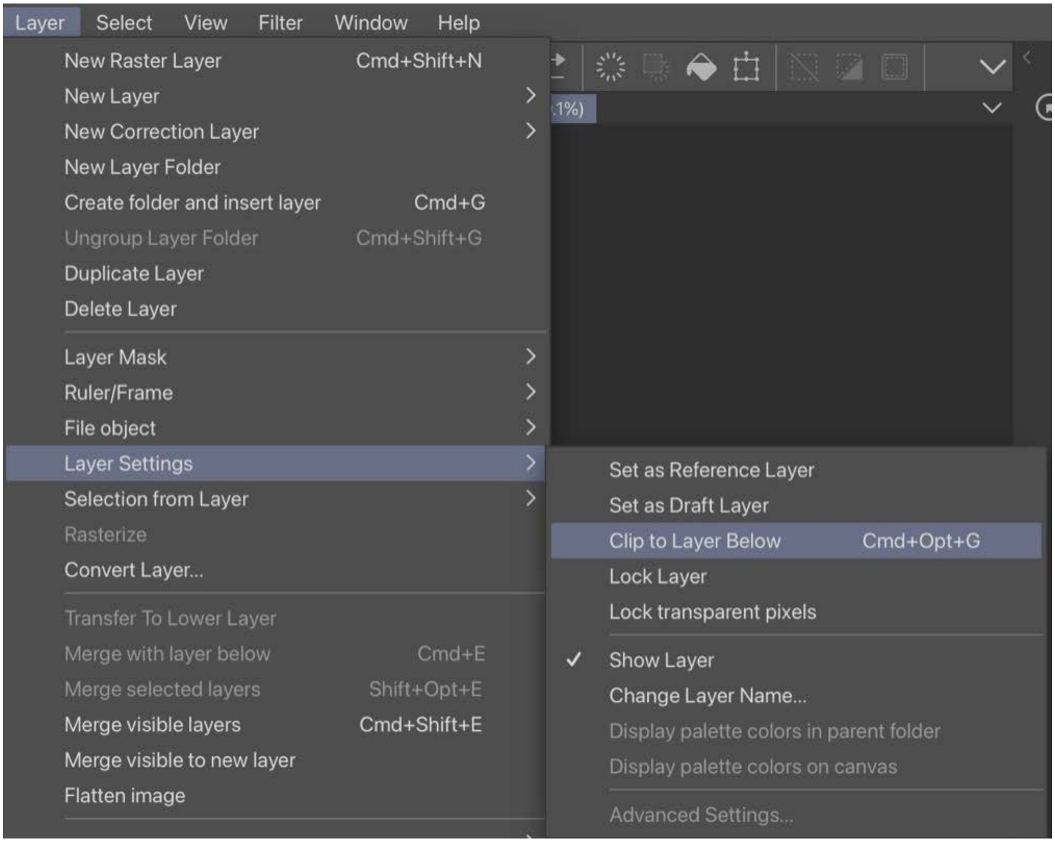


Figure 11.15 – Screenshot of the Layer drop-down menu

7. The pattern will now only be shown on the contents of the layer below it. The clipping layer is marked in the **Layer** palette by a red marker next to the layer thumbnail, which is next to the **Shock 02** layer, as shown in the following screenshot:

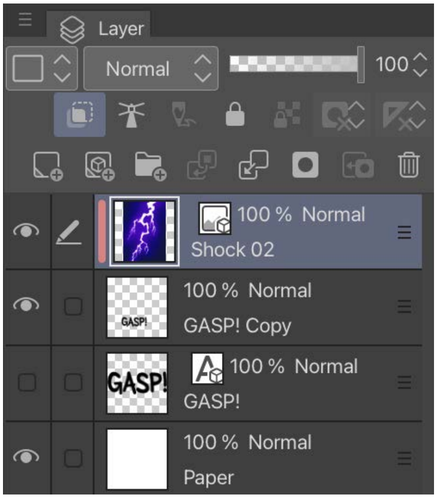


Figure 11.16 – Screenshot of the Layer palette with a layer mask on

8. To add an outline to the sound effect, follow the instructions in the *Adding an outline* section of this chapter, but apply it to the original text layer at the bottom of the stack. This will produce a sound effect along with the original text layer that looks like the following screenshot:



Figure 11.17 – Screenshot of text with patterns

The text now has a strong impression of the lightning pattern. You can add any pattern you like with the same method. Next, we will create perspectives or flow on sound effects by using the **Mesh Transform** tool.

Using the Mesh Transform tool to warp text

Lots of sound effects in manga and comics follow curves or the line of action to emphasize the art on the page. In the following screenshot, the sound effect for the explosion is angled and shaped to emphasize the action:

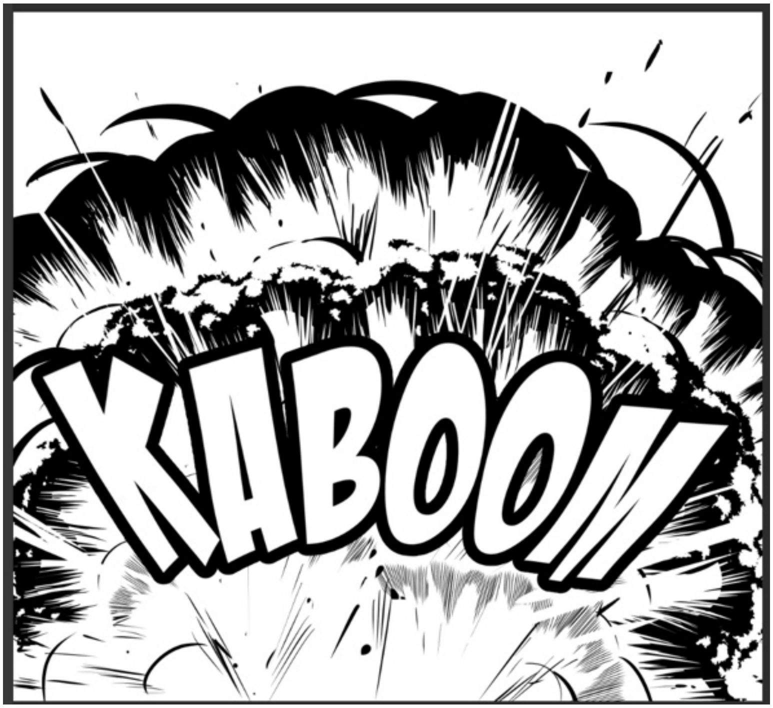


Figure 11.18 – Screenshot of transformed text

Though you can hand-draw sound effects like this if you want to (and hand-lettering is a great skill to have!), you can also create curved and warped text using the **Mesh Transform** tool.

Follow these steps to create a warped sound effect:

1. Ensure that your text layer is active by locating it in the **Layer** palette and clicking on it to highlight it.
2. In the **File** menu, click on **Layer**, and then click on **Duplicate Layer** to create a copy of the text layer. Alternatively, you can also click on the layer in the **Layer** palette and drag it to the **New Layer** icon to create a copy of the layer.
3. With the layer copy selected and the original text layer not visible, click on **Layer** in the **File** menu and then click on **Rasterize** to convert the layer to raster.
4. In the **File** menu, click on **Edit**, then go down to **Transform**, and click on **Mesh Transformation**.

   A grid of lines and points will appear over the layer contents.

5. In the **Tool property** palette, check the **Number of horizontal lattice points** and **Number of vertical lattice points** options. These both default to `4` points. For more fine control over the distortion of the text, make the number of lattice points higher. This must be done before you start moving any of the points around. The option to add more points will disappear after you start distorting the mesh! In the following screenshot, the number of horizontal points has been increased to `6` to accommodate for the longer length of the sound effect:

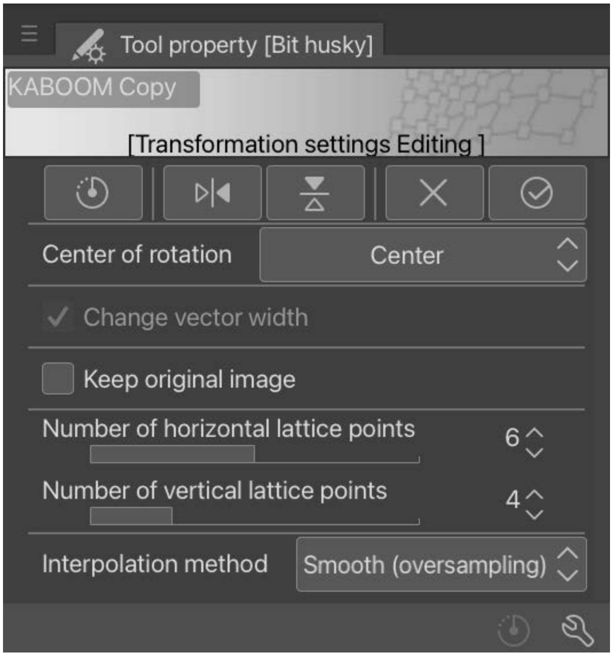


Figure 11.19 – Screenshot of the Mesh Transform tool property

6. Click on the points at the intersections of the grid and drag them to distort the sound effect. The areas around the moved point will shift and distort as the points are moved, as shown in the following screenshot:

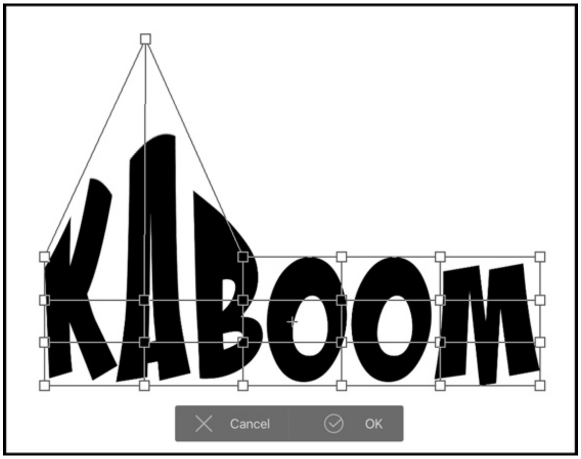


Figure 11.20 – Screenshot of the Mesh Transform grid on text

7. Continue moving the points around to reshape the contents of the mesh. In the following screenshot, a curved effect has been created by staggering the control points:

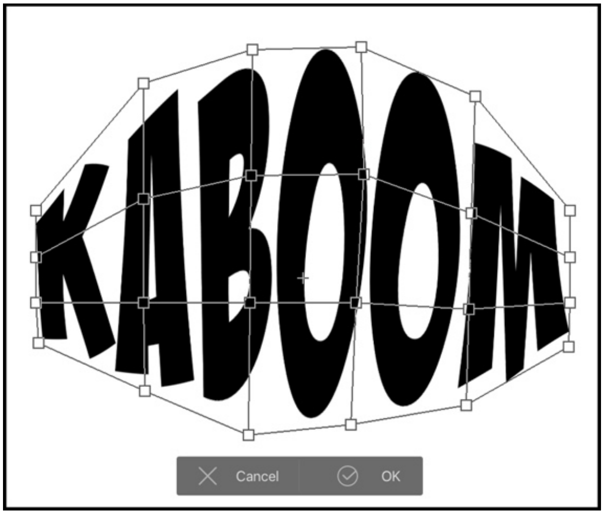


Figure 11.21 – Screenshot of the Mesh Transform grid on text 2

8. Click on **OK** to commit the transformation. The final sound effect we've created in this example is shown in the following screenshot:



Figure 11.22 – Screenshot of the transformed text

> **Tip**
> Mesh transformation isn't just for sound effects! It can also be used on pattern materials to create more realistic clothing patterns. What will you use mesh transformation for?

It was such a fun process transforming text with the Mesh Transform tool! It gives text a unique charm and helps create drama on a manga page. Now you know this function is not only for drawings but can be applied to text too! Have a great, creative time when you add sound effects to your manga next time!

You can also be creative with manga title text with methods you learned in this chapter!

Making titles

We are going to look at some possibilities for creating title text by using methods we have just learned in this chapter. The title text is not only for telling what the manga is called but also showing the feeling and tone of the content, such as thriller, horror, romance, comical, fashionable, or tragic. Let's have a look at the potential of title texts.

The following screenshot is a title for a light-hearted manga story. I used a ready-made font, and added a vector cloud drawing, then finally gave them the same color. The cloud shape is placed like a crown on top of the title, to emphasize the theme "sky," hence the use of the color blue too:



Figure 11.23 – Screenshot of title text 1

The following screenshot is the second example, which is a title for a science fiction, horror manga. I used a ready-made font, and then fading, scratching, and dripping textures were added using ink tools. Using the color white only on a black background, I emphasized the darkness of the story:



Figure 11.24 – Screenshot of title text 2

The third example in the following screenshot is a thrilling adventure manga. The main content is strictly night scenes. With the color white, I created a handwritten title with the **Brush** tools, then added a spattering effect with star and crescent shapes on a navy color background, to depict a night scene. Finally, using the **Soft Airbrush** sub tool, I sprayed the color gold around the center of the title on a new clipping layer. You can find more on clipping layers in *Chapter 12*, *Making Layer Masks and Screentones*:



Figure 11.25 – Screenshot of title text 3

The following screenshot is the final example, a title for a romantic comedy manga. A ready-made font is warped by the **Mesh Transform** tool to create a slight perspective effect, which you can find in the preceding section of this chapter, *Using the Mesh Transform tool to warp text*. Outlines are added with the layer property **effects** setting, then a rainbow color gradation is created by using the **Soft Airbrush** sub tool on a new clipping layer. The vector pen and clapper board drawings were created on a layer underneath the title. On the background, a downloaded flower and butterfly pattern was added by using the **Decoration** tool, then finally, it was partially colored with white by using the **Brush** tool on a new clipping layer with a layer mask setting. You can find more on layer masks in *Chapter 12*, *Making Layer Masks and Screentones*:



Figure 11.26 – Screenshot of title text 4

Each of the title texts shows its own unique feeling and tone, depicting vaguely what the content is about.

You can be very creative with your own title text design with the methods we learned in this chapter!

Summary

In this concise chapter, we have explored ways to create sound effects. We have used specialized fonts to make sound effects, and have learned how to punch up those fonts with outlines and gradient effects. We used clipping layers to add a pattern to a sound effect, and learned about mesh transformation to distort and curve our sound effects. Finally, we looked at various title text artworks using some of the techniques we learned, such as downloading fonts, using the Mesh Transform tool, and using clipping masks.

In the next chapter, we will explore the wonderful world of masks. Not masks for costumes, but layer masks! Read on to learn more about this feature of Clip Studio Paint.

12
Making Layer Masks and Screentones

In traditional painting, you might use masking tape to cover up the parts of the piece that you shouldn't touch, so that you can go crazy with your brush. There is a similar function in digital drawing too! The layer mask is an extremely useful feature in digital art that has many applications. Thanks to the function, we can concentrate on drawing without caring too much about pen strokes going over boundaries.

We will also look at screentones; they are used less and less in modern printing but are still quite popular in black-and-white manga printing because they have their own beauty. You can use screentones together with a layer mask to create a nice shading effect for your manga art.

We are also going to learn about using screentones with clipping layers, which has a different masking effect from layer masks.

In this chapter, we will learn about the following topics.

- What is a Layer mask?
- Using a Layer mask
- Adding Screentones
- Using a Clipping Layer

By the end of this chapter, you will know more about the benefits of digital drawing. You will be able to work on each part of a drawing tactically by using layer masks, screentones, and clipping layers.

Let's dive right in!

Technical requirements

To get started, you need Clip Studio Paint installed on your device and a new canvas open with a white paper layer and a layer with any art. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

What is a Layer Mask?

A layer mask is a feature of digital art that allows parts of a layer to be hidden without being erased for good. This allows us to fine-tune a drawing or part of a drawing without losing what has already been done. Layer masks can be adjusted over and over, hiding parts of a drawing and then being removed again to bring those parts back.

A good way to think about a layer mask is as being like a Halloween mask. Putting a mask on your face conceals your real face. Take the mask off, and your face is visible again.

Unlike the case when using eraser tools, layer masks are not permanent and allow changes to be made without losing any data. We can see what a character looks like with a different hairstyle or temporarily hide parts of a background, for example. The best thing is that layer masks are easy to use and edit! In the next section, we will see how to use a layer mask.

Using a layer mask

In order to make a layer mask, you will need a canvas open with one layer and some sort of content on it. This could be a sketch, an ink drawing, a photo, or anything else you desire, so long as there is some sort of content to mask out so that we can see how the layer mask works.

Follow these steps to create a layer mask and hide and restore content:

1. Select the layer to add the mask to by clicking on it in the **Layer** palette.
2. Click on the **Create layer mask** icon in the **Layer** palette. This icon is shown in the circle in the following screenshot:

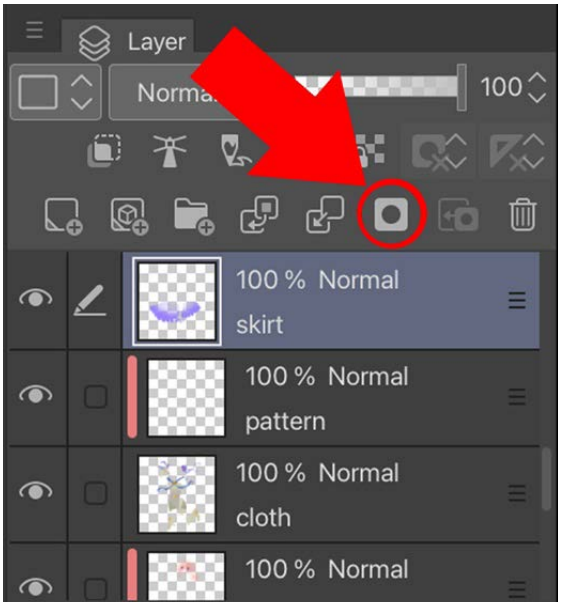


Figure 12.1 – Screenshot of the Layer palette

A new thumbnail will appear to the right of the layer thumbnail in the **Layer** palette. This is the layer mask. When the layer mask is selected, a secondary outline will appear around the layer mask thumbnail. The following screenshot shows a piece of art and a corresponding layer of the skirt color with a selected layer mask:

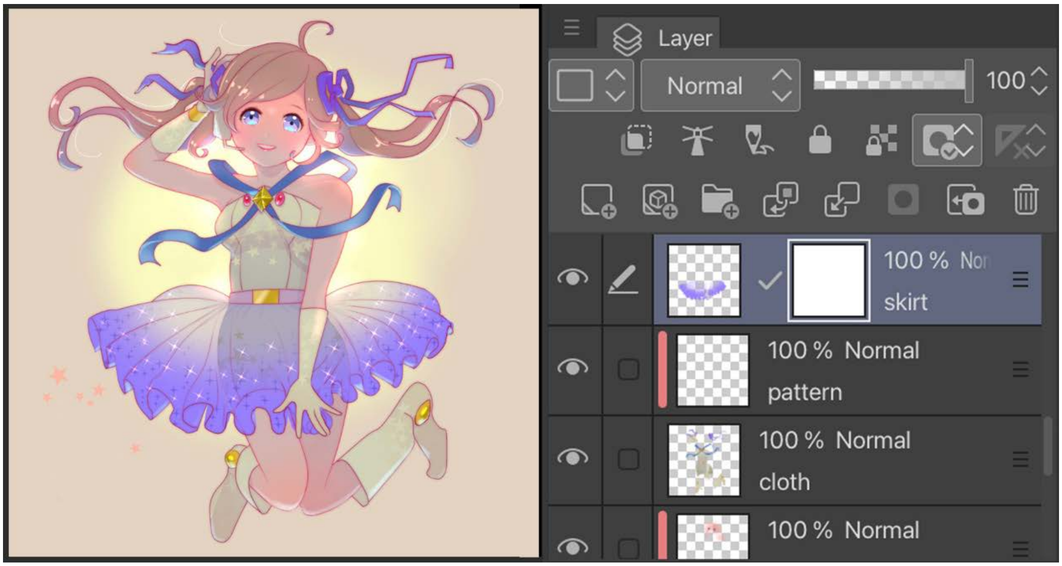


Figure 12.2 – Screenshot of an image and the Layer palette with a layer mask

3. To hide the content on the layer, select an **Eraser** sub tool. Erase the section of the layer that needs to be hidden. The masked area will show up in the layer thumbnail as blacked-out space. The following screenshot shows the black area where the skirt color layer has been masked:

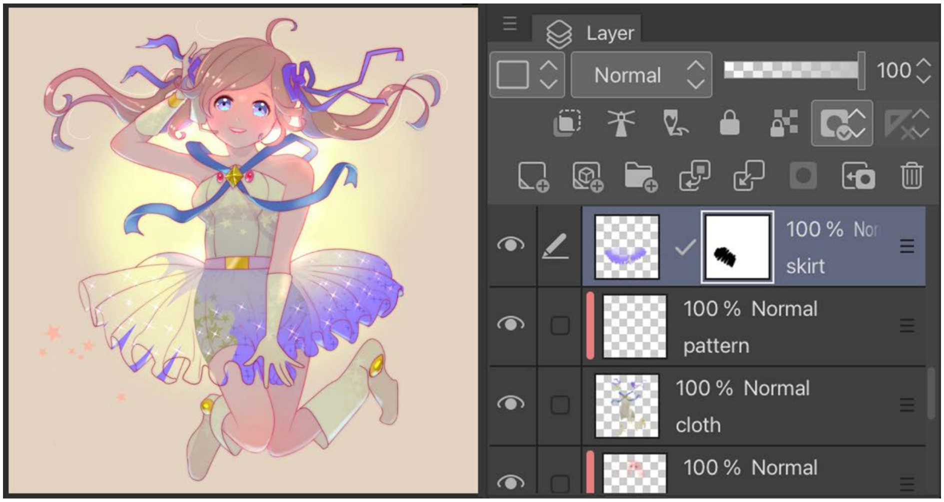


Figure 12.3 – Screenshot of an image that is partially masked

4. To make masked content visible again, select any pen or brush tool. Draw over the masked area again with the tool to show the masked content. The following screenshot shows that the middle of the masked area has been shown again because the area inside of the black mask is white again:

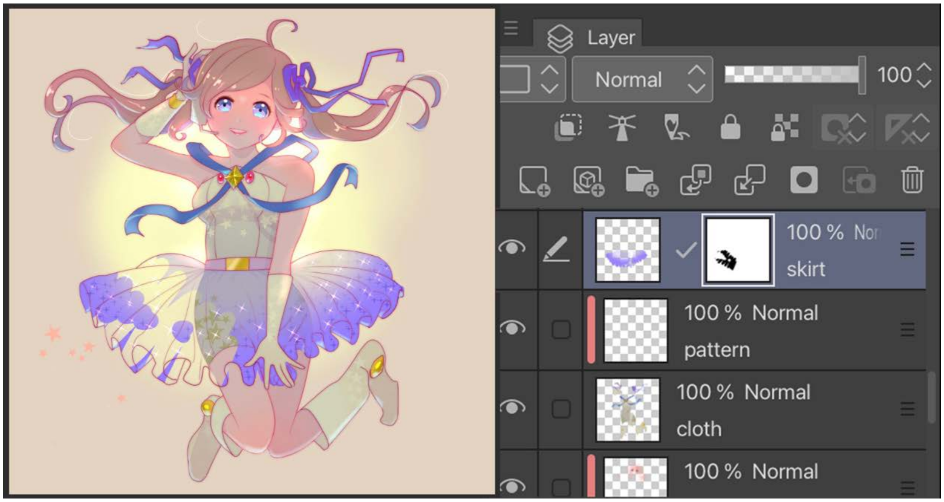


Figure 12.4 – Screenshot of an image that is partially masked (continued)

If you are having trouble editing a layer mask or the layer that a mask is attached to, double-check the **Layer** palette to ensure that the layer mask or the layer is selected before moving on to other troubleshooting. Sometimes, the layer can be selected instead of the layer mask, or vice versa, which can have undesired results.

> **Tip**
>
> Want a part of your drawing to have a ghostly or faded look? Use the **Soft Eraser** or **Airbrush** tool with the translucent color on a layer mask to fade out the edges of the drawing. To select the translucent color, click the checkerboard pattern square underneath the two squares that show the currently selected foreground and background colors at the bottom of the Clip Studio Paint interface. By using the translucent color, you can turn any drawing tool into an eraser.

Isn't it a big relief to know that there is a way to hide some part of a piece of art without erasing it, in case you need the hidden part again later in the process of creating your art? You don't need to worry at all, even if it's not visible at the moment, the masked part is always there and can be recovered when you want it back by either deactivating the layer mask or deleting it. Something is only ever masked temporarily!

Let's look at a different way of hiding parts of an artwork!

Creating Quick Masks using selection tools

Layer masks can be created quickly by using the **Selection** tools to select the areas of the drawing we want to hide and then adding the mask using active selection.

We covered a multitude of ways to make selections in *Chapter 6*, *Erasers, Selections, and the Sub View Palette*, so if you need a refresher on making selections, now is a great time to go back and review that chapter before continuing with using a selection to make a quick layer mask.

Once you've familiarized yourself with the **Selection** tools, follow these steps to create a layer mask quickly:

1. First, make a selection using one of the **Selection** tools. In the following screenshot, the lasso marquee tool has been used to make a selection around the character's ribbon:

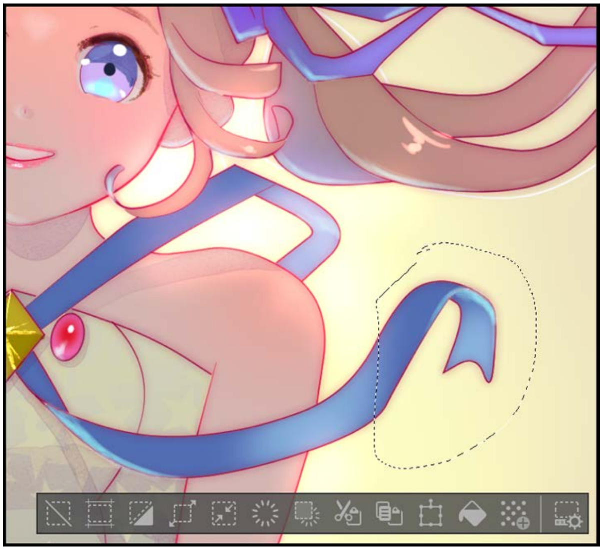


Figure 12.5 – Screenshot of an image with a selected area

2. In the **File** menu, click on **Layer**, then navigate to **Layer Mask** and click on **Mask Selection**. This path is shown in the following screenshot:

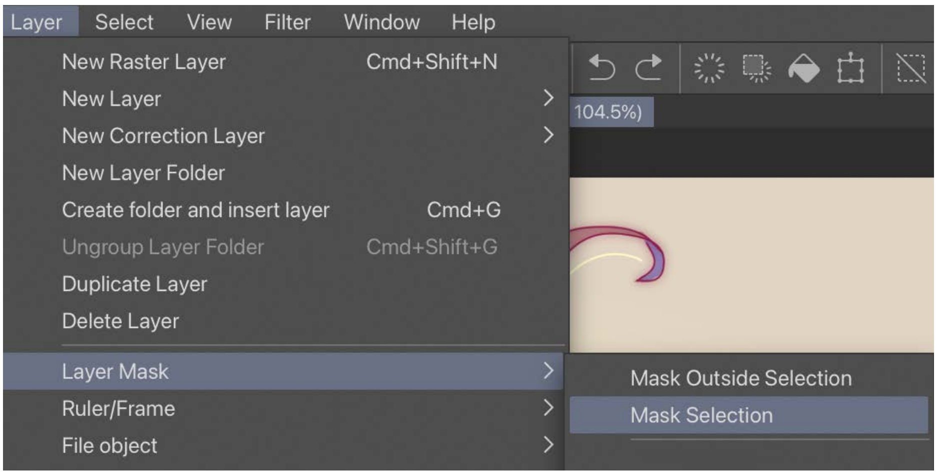


Figure 12.6 – Screenshot of the Layer drop-down menu

Using this method, the area inside the selection will be masked but everything outside of the selection will be visible. In the following screenshot, the selected colored part on the ribbon is now hidden by the layer mask:

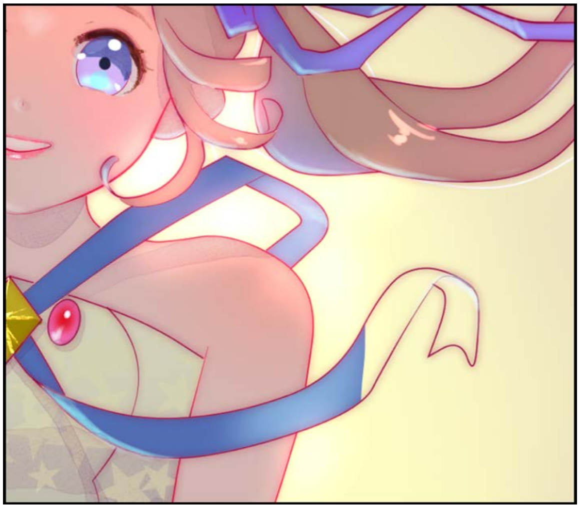


Figure 12.7 – Screenshot of an image with a masked area

3. To mask everything outside of the selection, in the **File** menu, click on **Layer**, then navigate to **Layer Mask** and click on **Mask Outside Selection**. In the following screenshot, all clothing color is gone except the end of the character's ribbon, because it was inside of the selection and so has not been masked:

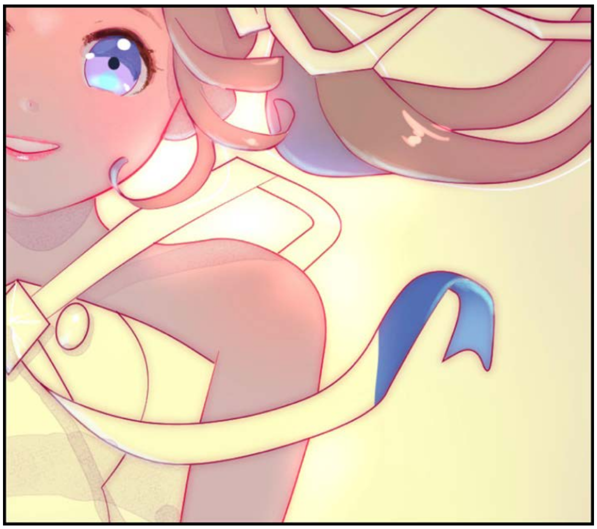


Figure 12.8 – Screenshot of an image with a masked area (continued)

Make any necessary edits to the mask, such as adding more masked parts using the erasing tool and an unmasked back with the Pen or Brush tool as detailed in the *Using a layer mask* section of this chapter.

If you want to deactivate the mask temporarily, click on the **Mask** drop-down menu in the **Layer** palette and uncheck the box next to the **Enable Mask** option icon to deselect it, as you can see in the following screenshot:

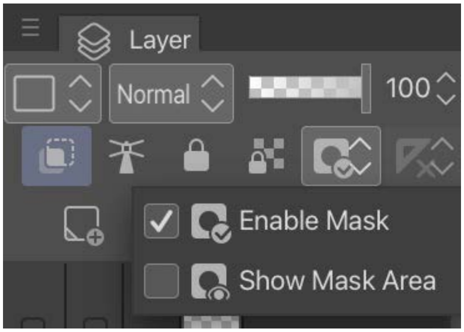


Figure 12.9 – Screenshot of the Mask drop-down options

To delete the layer mask, go to the **File** menu and click **Layer | Layer Mask | Delete Mask**, as shown in the following screenshot:

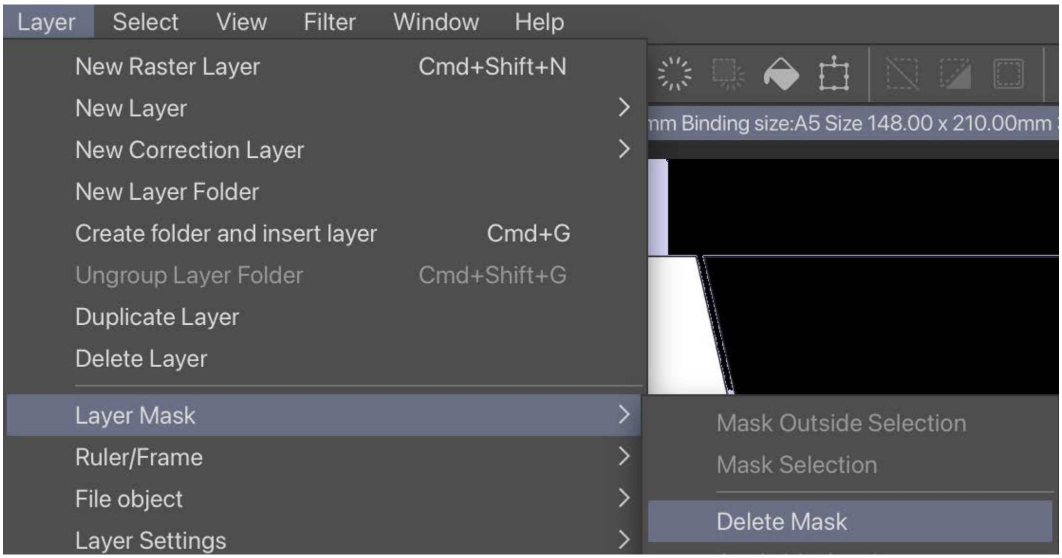


Figure 12.10 – Screenshot of the Layer drop-down menu

> **Tip**
>
> Want to mask everything outside of the selection quickly? Make your selection and then click on the **Create layer mask** icon in the **Layer** palette. A mask will automatically be generated for the outside of the selection.

Using the selection tools allows us to make masks more quickly and easily. Rather than having to go over large areas with the eraser tools, instead, we can make a simple selection and create a layer mask for that selection with the press of a button. What a time-saver!

We have been looking at how to use layer masks using erasers and selection tools. Now let's move on to find out about screentones and how we can use them with a layer mask!

Adding screentones

We're looking into how to use screentones with a layer mask to control shades of black -and-white for a manga.

In the old days, printers could only print black ink writing and drawings on paper. This meant that older printed illustrations didn't have gray tones. Artists had to draw detailed dots and line patterns using black ink in order to express gray tones for printing. But it's time-consuming to do that! To make the process faster, people invented screentones.

Screentones, or halftones, are made of a pattern of dots that provide shading. Back in the days before digital art, these tones would be printed on a big sheet of sticky-backed plastic. Artists would apply this large, clear sticker over their art and then carefully use a sharp knife to cut out the areas that didn't need tone on them and peel away the excess. The downsides to this method were that you had to keep buying new screentone sheets and that, sometimes, a careless stroke would cut through your original artwork and ruin it!

But now, we can mimic these patterns of dots digitally. And, thanks to layer masks, we can simply mask out the areas that don't need to be shaded without doing any damage to the screentone pattern or to our original sketch. This makes the screentone process easier and less stressful than it used to be!

The following is an example of using digital screentones. Note that the shadows are created using a pattern of circles that provide depth for the image:



Figure 12.11 – Screenshot of an image with screentones

Follow these steps to add tone to a large area:

1. Open a new file. For this set of instructions, the size and resolution don't really matter.
2. Open the **Material** palette.
3. Open the folder under the **Monochromatic pattern** category in the **Material palette** by clicking on the triangle next to the folder name to view the contents beneath it.
4. Click on the triangle next to the **Basic** sub-folder to view the contents of that folder.
5. Click on the **Dot** sub-folder to view the materials located in this folder.

6. Select the desired screentone material to apply to the image. In this example, we are using the **50.0 line 50% Circle Monochrome** material. Once you have selected the screentone material, click on the **Paste selected material to canvas** icon at the bottom of the **Material** palette, which looks as follows:

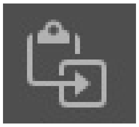


Figure 12.12 – Screenshot of the Paste selected material to canvas icon

7. The tone material will be applied to the entire canvas, as shown in the following screenshot:

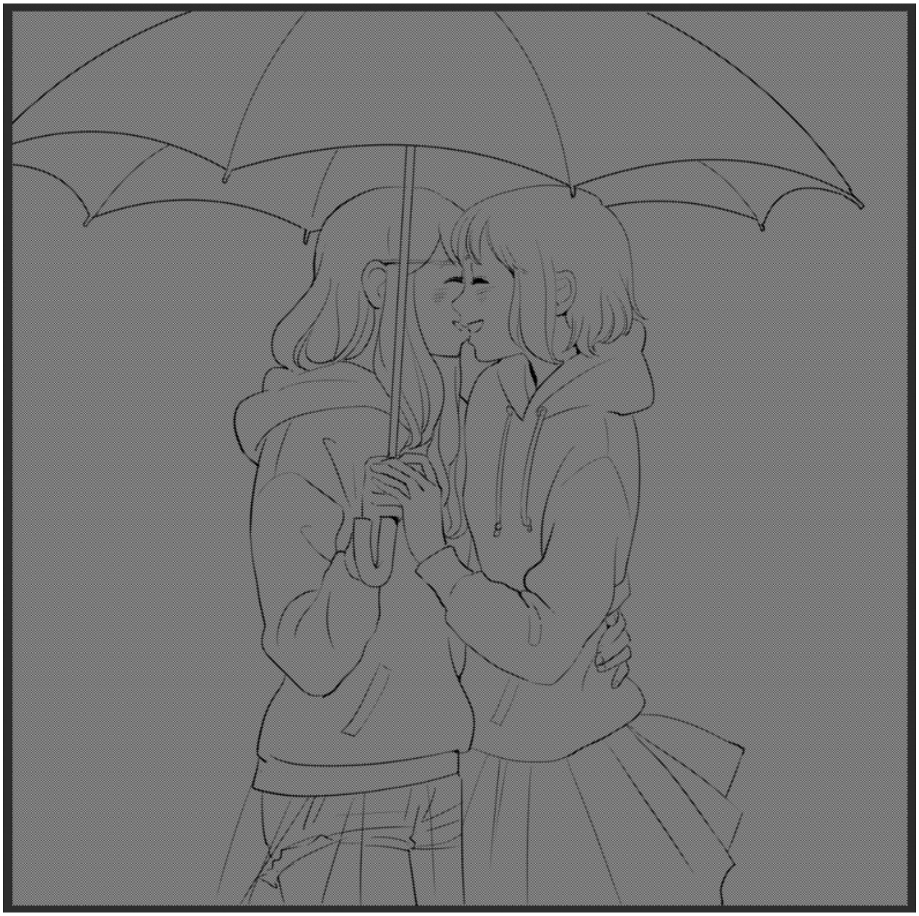


Figure 12.13 – Screenshot of an image with a screentone

8. The new **Material** layer will be made with an empty layer mask already attached to it. Use this layer mask to edit the screentone so that it only shows in the shadowed areas. The following figure shows the drawing with screentone shadows:

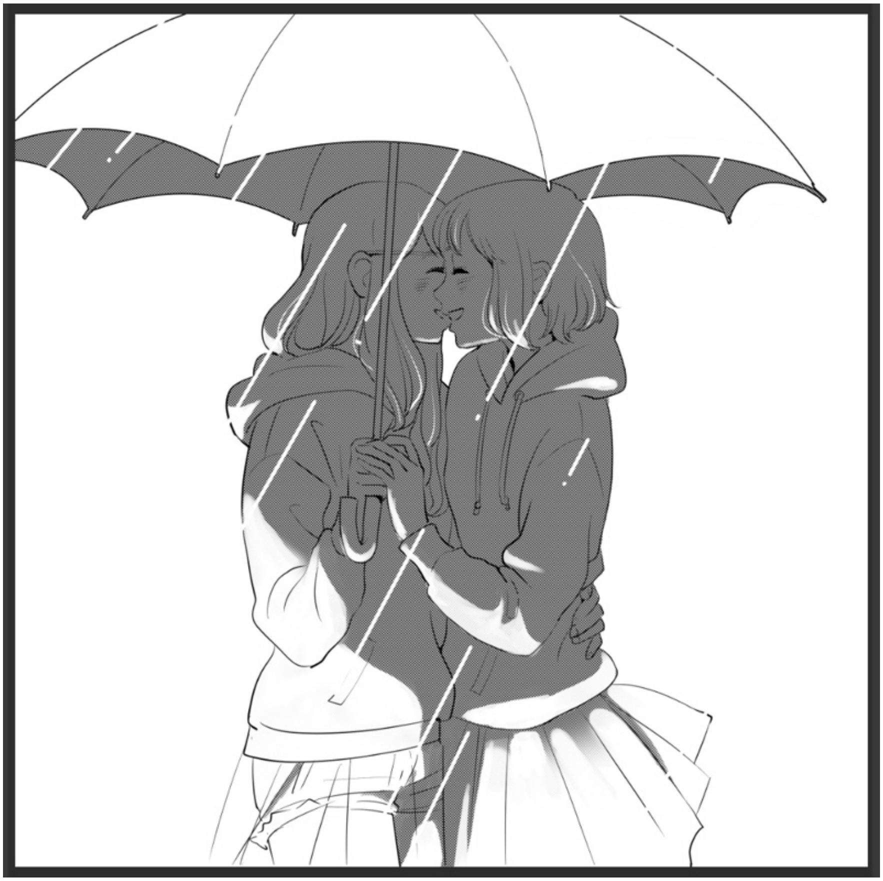


Figure 12.14 – Screenshot of an image with screentone shadows

You added shades using **50.0 line 50% Circle Monochrome** screentones! But are you wondering what the meaning of each screentone name is? You can find out more about that in the next section.

Lines and percentages in screentone names

Before we continue on with our next method for adding tone to images, let's take a moment to understand the terminology used for the screentone names. The following shows four of the tone materials in the palette:

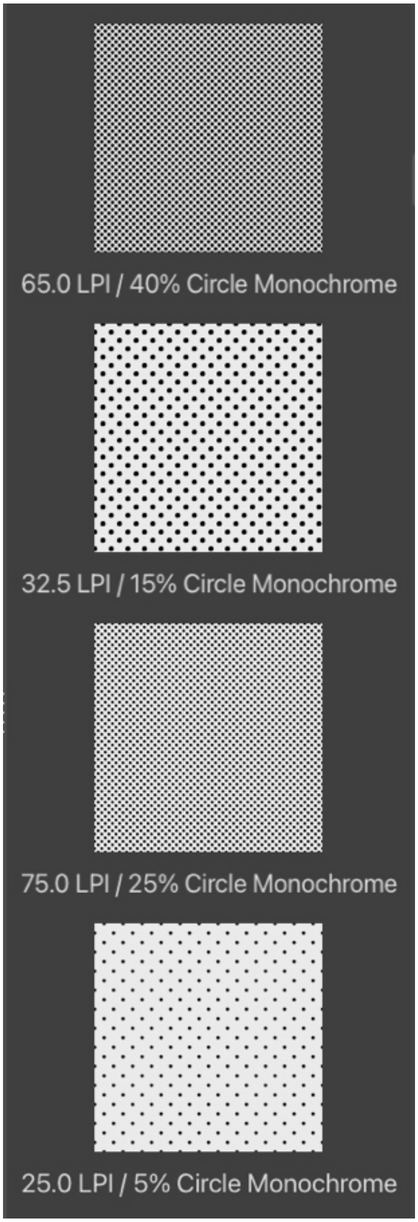


Figure 12.15 – Screenshot of four types of screentones

Beneath each tone material is the name of the tone. We can break these names into four parts. Each of these parts of the name is detailed as follows:

- **Screen frequency**: This is the number at the very beginning of each filename, appearing before *LPI*. For example, in the first material in the preceding figure, the number for the screen frequency is **65.0**. This number refers to how many lines of the pattern are repeated in a set area. Much like DPI, the larger this number is, the smaller the overall shapes in the tone pattern will be. Compare the **75.0** thumbnail to the **25.0** one and note how much larger the circles are in the **25.0** example. The larger the number at the beginning of the material name, the smaller the dot pattern will be.
- **Density**: This part of the name refers to the number with the percent sign shown in *Figure 12.15*. Density controls how dark the created shadow will appear to be. For example, a density of 10% would be a very light shadow, made of very small dots in the screentone pattern. However, a density of 95% would be made of very large black dots that might only have very small white dots in the pattern because of the overlap. A density of 100% would be pure black. Each tone in the image has a 50% density, which will provide medium shadow in the completed artwork.
- **Type**: This refers to the shape that the pattern is created from. Most commonly, screentones are made of solid circles. However, we can make tone patterns from many different shapes and symbols, as we will see in a later section. Each of the tones in the preceding figure uses the **Circle** type.
- **Gradient Style**: All of the tones in the preceding figure are of the **Monochrome** variety because they are located in the **Dot** screentone folder. This means that the tone has only one density and one screen frequency level throughout the entire tone. However, if we look in the **Gradient** folder instead of the **Dot** folder, we will find tones that have **Linear** and **Circular** gradients that fade from dark to light and back again in a pattern. These specialty tones can be used for effects or to get soft shading.

Now that we know a bit more about the terminology of screentones, let's look at the fastest way to apply tones in Clip Studio Paint: the simple tone options.

Creating simple tones using selections

We can make a selection and then fill that selection with a customized tone, instead of using one that is already in the **Material palette**.

The following steps show how to add a screentone to a selection. You will need to have an open file ready to follow these steps:

1. Use the selection tool of your choice to make a selection.
2. Beneath the active selection in the command bar, click on the **New Tone** icon. This is shown with a red circle in the following screenshot:

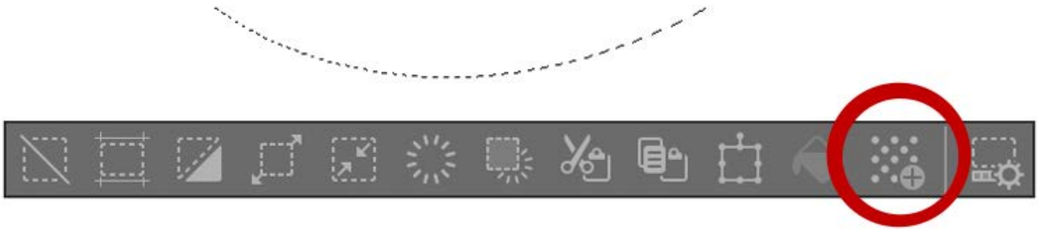


Figure 12.16 – Screenshot of the command bar

3. Choose the desired settings from the **Simple tone settings** dialog box that will appear. Note that the **Frequency**, **Density**, and **Type** properties that we addressed earlier are also used in this dialog box's options. We can also adjust the angle of how the pattern is applied:

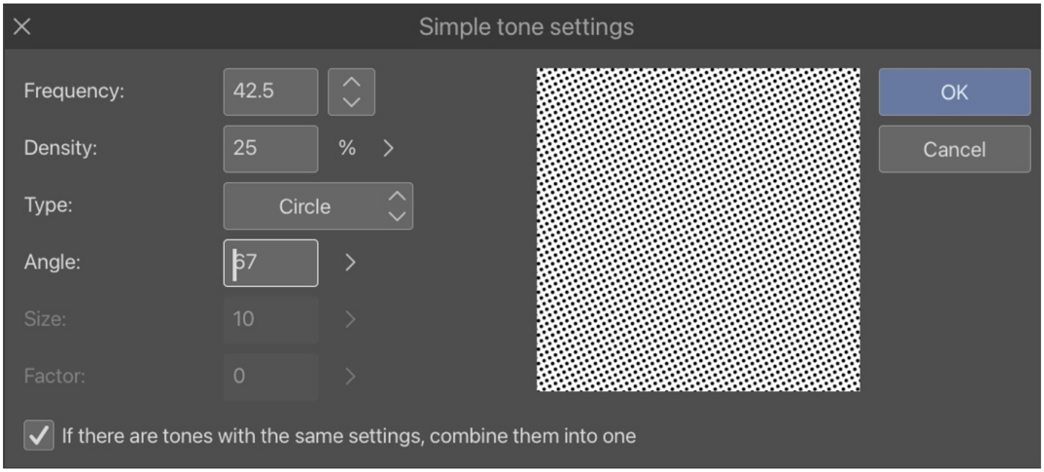


Figure 12.17 – Screenshot of the Simple tone settings dialog box

4. Click on **OK** to fill the selection with the new tone.

> **Tip**
> If you will be using the same simple tone settings in multiple selections, checking the **If there are tones with the same settings, combine them into one** option box will create all of those new tones on one layer. This can help save system resources and make layers easier to navigate.

I hope that you have started to understand more about how to handle screentones. Let's look at the variations for the shapes that create patterns of screentones!

Simple tone options

Let's talk for a moment about the different options available under the **Type** drop-down menu in the **Simple tone settings** dialog box. This allows us to choose shapes other than simple circles. These shapes include hearts, stars, asterisks, and flowers, among others. They can be used to create special effects in certain scenes, or just to provide a variety of tones. In the following figure, the star shape has been made with the **star** screentone:

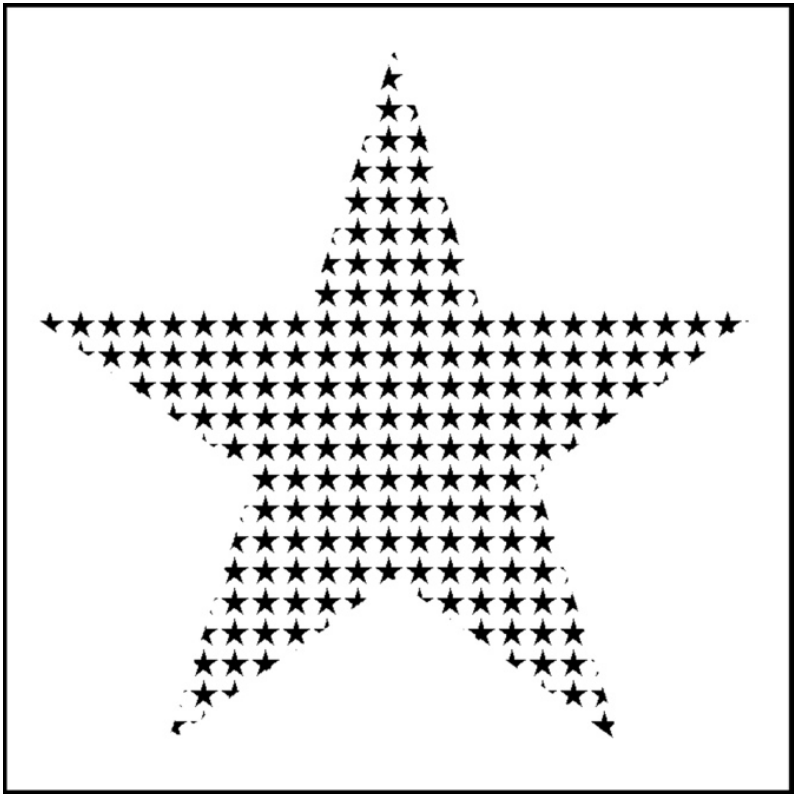


Figure 12.18 – Screenshot of a star shape using the Star screentone

The **Size** and **Factor** options in the **Simple tone settings** dialog box are only available when using the **Noise** option under the **Type** option. Using the **Noise** option makes the stars distort randomly; the following is an example of the **Noise** screentone:

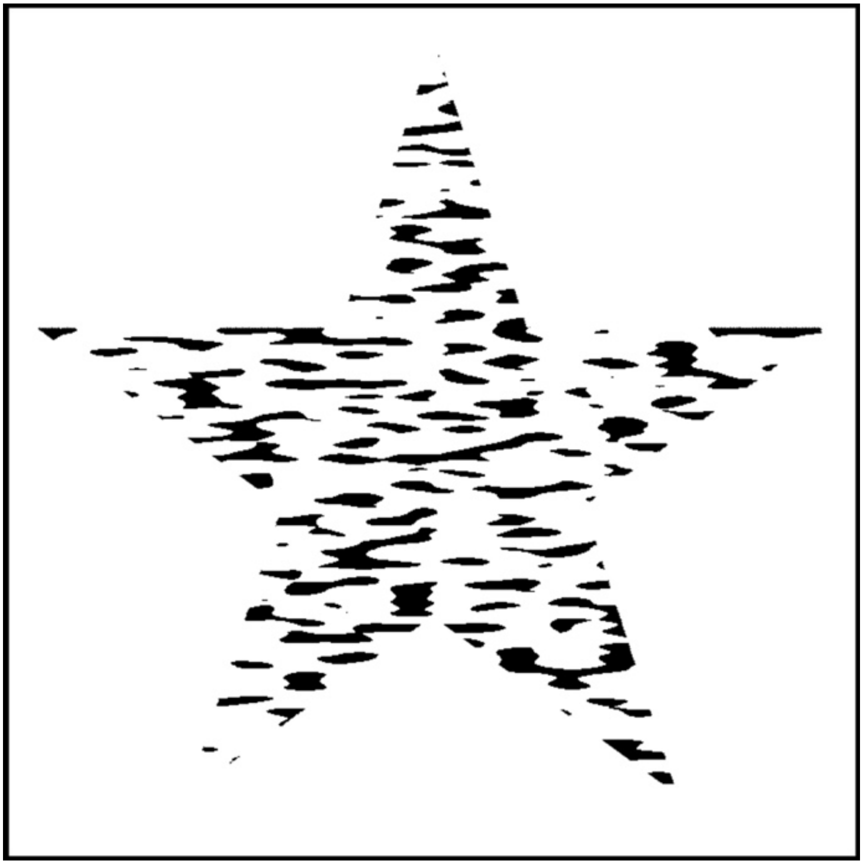


Figure 12.19 – Screenshot of a star shape with the Noise screentone

You can now select, paste, and edit screentones by using a selection tool, a layer mask, the **Material palette**, and the **Simple tone settings** dialog box!

Creating screentones using Layer Property

There is also another incredibly easy way to add screentones to your art! With just one click on the **Layer Property** option, your drawing gets a screentone.

Follow these steps to learn how to do it:

1. Open a canvas that already contains some art. Create a new raster layer, then use any ink tool with any light-colored ink to fill in an area where you want to add a screentone.
2. Make sure the layer you have just drawn on is selected, then go to the **Layer Property** palette and click on the **Screentones** icon in the **Effect** options, which is marked with a red circle in the following screenshot:



Figure 12.20 – Screenshot of a color-filled area and the Effect options

3. Now the colored area has become a screentone, as you can see in the following screenshot:

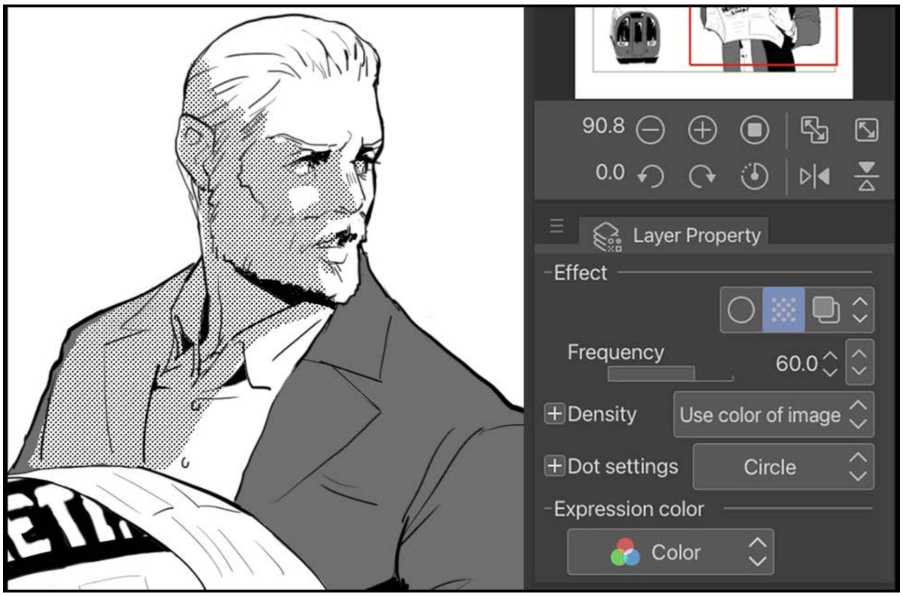


Figure 12.21 – Screenshot of screentone settings and in the Layer Property options

4. But wait – the screentone now covers part of the character's jacket, which had a dark gray color but looks lighter now. That doesn't give the right shade for this character. You can fix this by clicking on the **Density** option on the **Layer Property** palette and selecting **Use brightness of image** from the **Density** drop-down menu, as shown in the following screenshot:

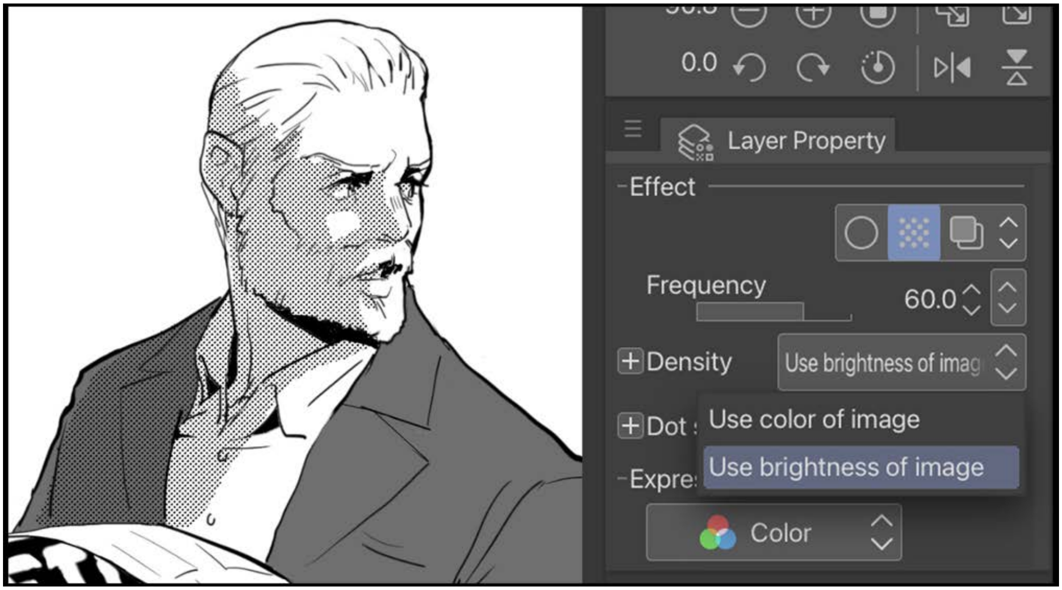


Figure 12.22 – Screenshot of the Density drop-down options

The jacket area is now shaded much better because the screentone's density has been adjusted for the brightness of the colors already on the canvas.

If you follow the same steps but instead fill an area with a dark color instead of a light one, the resultant screentone will be dense and dark too!

When you use screentones incorrectly, your art can look really bad, with the screentone shading for a character breaching the character's outline and intruding on the background. How can we fix this easily? Wouldn't it take too much time to adjust the screentones using eraser and pen tools here and there so that we don't go over the boundaries when we want screentones to stop at the character's outline?

There is a good function to know about when you want to add screentones to art right up to a boundary and no further. It is called the clipping layer function. It makes your shading very accurate! We'll look into this in the next section.

Using the clipping layer function

It's great to know that there is the clipping layer function for digital drawing when you are shading. A clipping layer is a layer that clips to the layer below it, only showing the contents of the top layer in places where the bottom layer has pixels filled in. It comes in handy when you want to add shading only inside a colored area.

I guarantee that you will find this feature very useful once you try it by following these steps:

1. Open your canvas and create a new raster layer with any inked art. Choose a light gray color from the **Color** palette and then use the **Fill** tool to fill with color any area that is enclosed by outlines.
2. Create a new raster layer on top of the layer, then use the **Soft Airbrush** tool with any dark color to paint an area where you want to add a screentone. Do not worry, as the color won't stay in the gray area; just add variations of thin and thick color, something like the following screenshot:



Figure 12.23 – Screenshot of an airbrushed area

3. You can do this step from the **File** menu too, but I'll show you the easiest way to create screentones from the **Layer** palette (in just one click!). Make sure the layer with the airbrushed color is selected, go to the **Layer Property** palette, and click the **Screentones** icon in the **Effect** options, shown with a red arrow in the following screenshot:

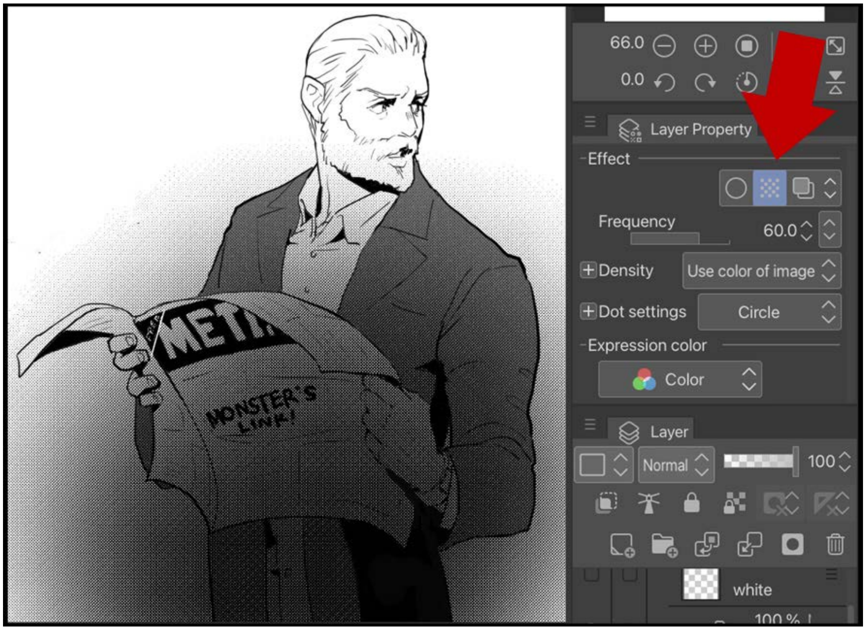


Figure 12.24 – Screenshot of the Layer Property options

4. As you can see in the preceding screenshot, the airbrushed area has now turned into screentones. Click on the **Clip at layer below** icon in the **Layer** palette, which is marked with a red circle in the following screenshot:

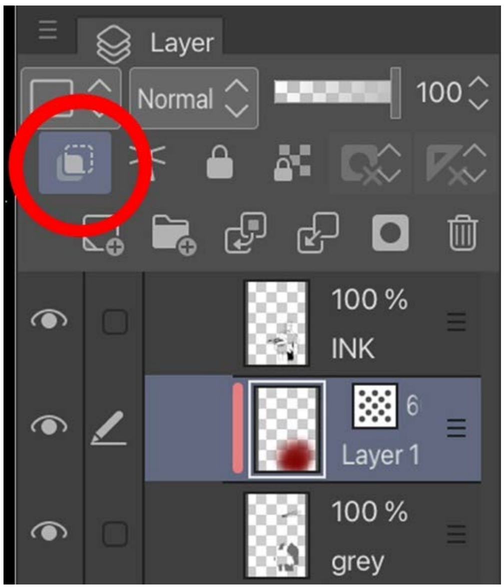


Figure 12.25 – Screenshot of the Clip at layer below icon

5. Once it's activated, the icon is highlighted in blue, and a pink line appears next to the clip layer thumbnail, as you can see in the preceding figure. The image now has screentones only on the gray area of the character's jacket, as shown in the following screenshot:



Figure 12.26 – Screenshot of clipped screentones

Using clip layers, you can combine screentones and grayscale in some clever ways! You don't have to spend a lot of time using brush and eraser tools to make adjustments around the boundary edges to make sure your screentones neatly sit inside them.

In the following screenshot, we have used screentones over flat gray fills to add more dimensions to the comic panel:

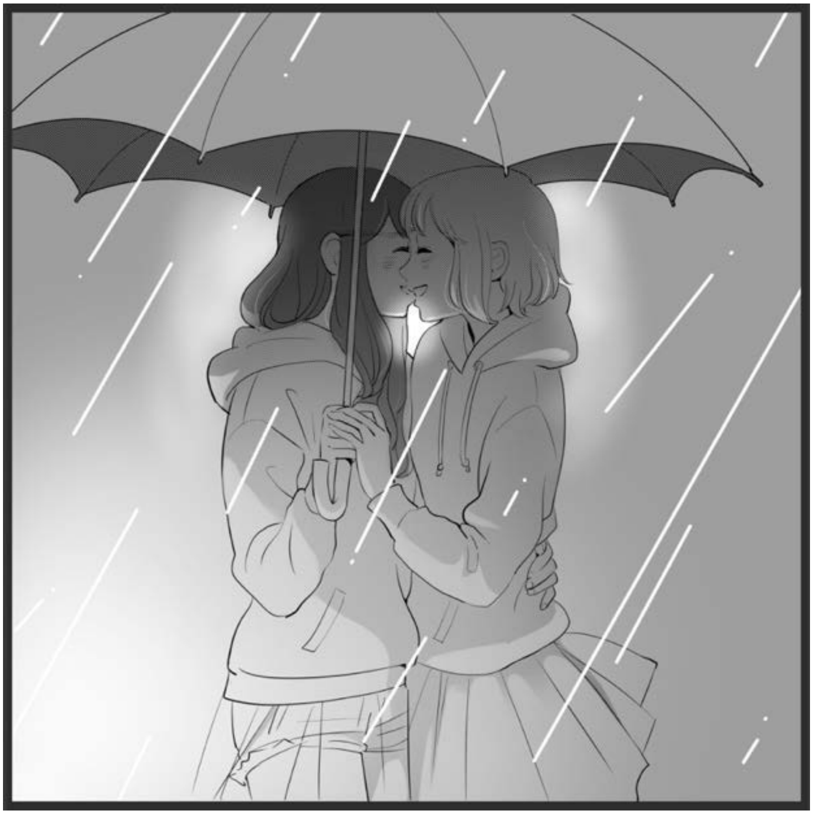


Figure 12.27 – Screenshot of an image with grayscale and screentones

The clipping layer function is one of the huge advantages of digital drawing; you can using it with patterns, colors, shades, and screentones. And, of course, you can use it in combination with a layer mask. You can activate it, deactivate it, and modify content anytime you want!

Summary

In this chapter, we learned what a layer mask is and how to create one. We also learned how to make a layer mask using selection tools to save time. We then learned about the benefits of using layer masks in comparison with eraser tools. We also used screentone materials and created simple tones by using selections and layer masks. To finish off the chapter, we learned how to use a clipping layer to combine screentones with grayscale.

In the next chapter, we are going to learn all about the ruler tools that make Clip Studio Paint a truly powerful piece of art software. You won't worry about creating accurate angles and perspectives anymore. Keep reading to learn more!

13
All About Rulers

One of the handiest tools in an artist's toolbox is the humble ruler. Whether it's a regular straight ruler, an set-square, or a set of French curves, rulers can really make a difference to your artwork.

Ruler tools in Clip Studio Paint work just like straight rulers or curved rulers in real life, except that they're digital—and they can be customized and made to produce certain special effects easily, such as all lines going to a specific focal point (or even curving to a specific focal point). If you draw or ink in the digital realm, you want to make sure you're familiar with these amazing tools.

We will cover the following key topics in this chapter:

- Introducing rulers and the types in Clip Studio Paint
- Using rulers in Clip Studio Paint
- Using the symmetry ruler
- Focus and parallel line rulers
- Understanding perspective rulers
- Making rulers inactive
- Drawing an ellipse in perspective
- Switching the active ruler
- Using grids and guides

We are going to take a deep dive into the special rulers in Clip Studio Paint in this chapter. We will briefly cover the basic rulers, and then we'll take a more in-depth look at the other ruler options.

Now, let's get right into rulers!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and a new canvas opened with a white-colored paper layer. Any size is fine, but I recommend creating a 300 dpi square canvas for working through the content in this chapter.

Introducing rulers and the types in Clip Studio Paint

When you draw a straight line digitally, you just need to pick the **Straight line** sub tool from the **Direct draw** tool group, then click and drag. And it's done! It's quite a simple task. But when you want to create one with a textured brush, you need a ruler to guide you to create a straight line no matter how steady your hand moves are. Or, if you are going for a three vanishing point perspective drawing, you need an accurate guide! Yes, there are good ruler tools for all these options.

There are not only the straight, **Linear** rulers but also **Curve** rulers, **Figure** rulers, **Ruler pen**, **Special** rulers, guides, **Perspective** rulers, and **Symmetrical** rulers. These are the rulers available in Clip Studio Paint, which you can see in *Figure 13.1* in the next section. They will be introduced one by one with examples in this chapter. So, if you get confused about which ruler is best for you, you can always come back to this chapter to check the descriptions with rich sample screenshots!

Using rulers in Clip Studio Paint

In this section, we are going to get to know different ruler types and how to snap to and manipulate rulers in Clip Studio Paint. Each ruler has great usage; they will surely help you to create accurate lines and shapes exactly how you need them to be!

Let's find out what rulers are available first and try using them. You will find the ruler sub tools under the **Ruler** section in the toolbar:

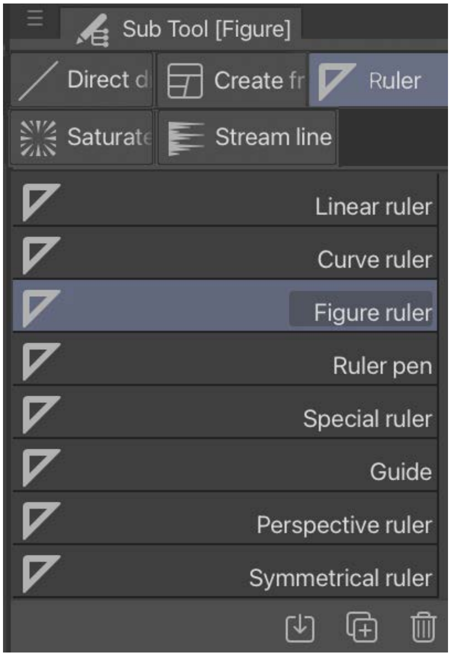


Figure 13.1 – Screenshot of the ruler Sub Tool palette

The first four tools, **Linear ruler**, **Curve ruler**, **Figure ruler**, and **Ruler pen**, are the tools that we will be briefly covering in this section. The tools listed below these four are a little more complex and we'll delve into them in more detail as the chapter continues.

Ruler snapping options

Before we get into how to use each of the ruler tools, we need to learn about the snapping options. When a ruler isn't working as expected, most of the time, it is because snapping is turned on or off. So, when getting undesired results with the ruler tools, it is best to check these options first.

The three snapping options can be found in the Command Bar above the area where the currently active document is displayed. They are shown in the following screenshot:



Figure 13.2 – Screenshot of the ruler snapping options

From left to right, these options are **Snap to Ruler**, **Snap to Special Ruler**, and **Snap to Grid**. In the preceding screenshot, the **Snap to Ruler** option is the only one currently turned on and is marked by a light blue box. Now let's look at what exactly they do:

- **Snap to Ruler** constricts the marks made by the current tools to any active basic ruler (linear ruler, figure ruler, ruler pen, and so on). If the active ruler is a special ruler, such as a perspective ruler, this option will not force the drawing tool to follow that ruler.
- **Snap to Special Ruler** forces tools to restrict their marks to any currently active special ruler, such as symmetry, focus line, and perspective rulers.
- **Snap to Grid** forces tools to stay within the confines of the grid, when it is visible. More on the grid later in this chapter.

To turn a snap option on or off, simply click on it. Multiple snapping options can be active at one time. Remember that the snapping options will force your tools to constrain themselves to any currently active ruler that fits their criteria, so if you have a drawing tool that isn't drawing where you want it to, and you have a ruler in your image, check the snapping option first to see whether that is the issue!

Now that we've discussed snapping, let's move on to the basic rulers and their functions.

Linear ruler

The Linear ruler works just the same as a regular old ruler that you might buy in any store. It is the simplest of rulers, used for making a single straight line.

To use **Linear ruler**, select the sub tool, click on your canvas, and drag. Release your mouse or stylus once you have reached the end of where you want the ruler to be. The ruler will be shown as a single colored line, as shown in the following screenshot:

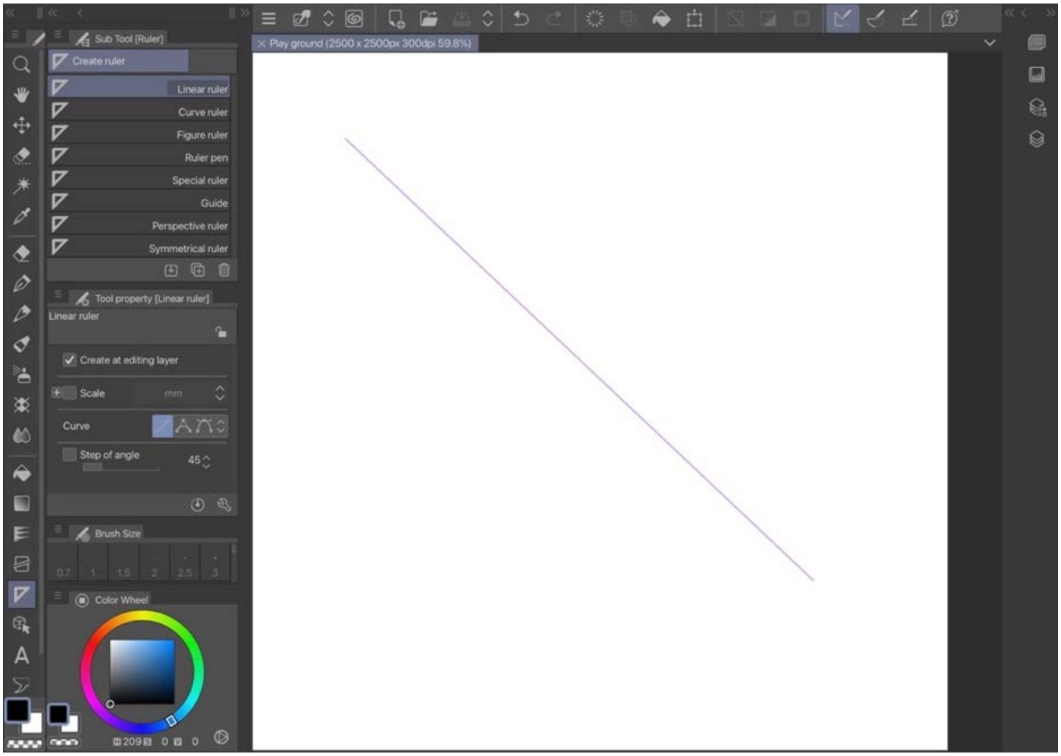


Figure 13.3 – Screenshot of a Linear ruler example

When the **Snap to Ruler** option is active, using a tool such as the G-pen will make a line along the ruler that we just made, as shown in the following screenshot:

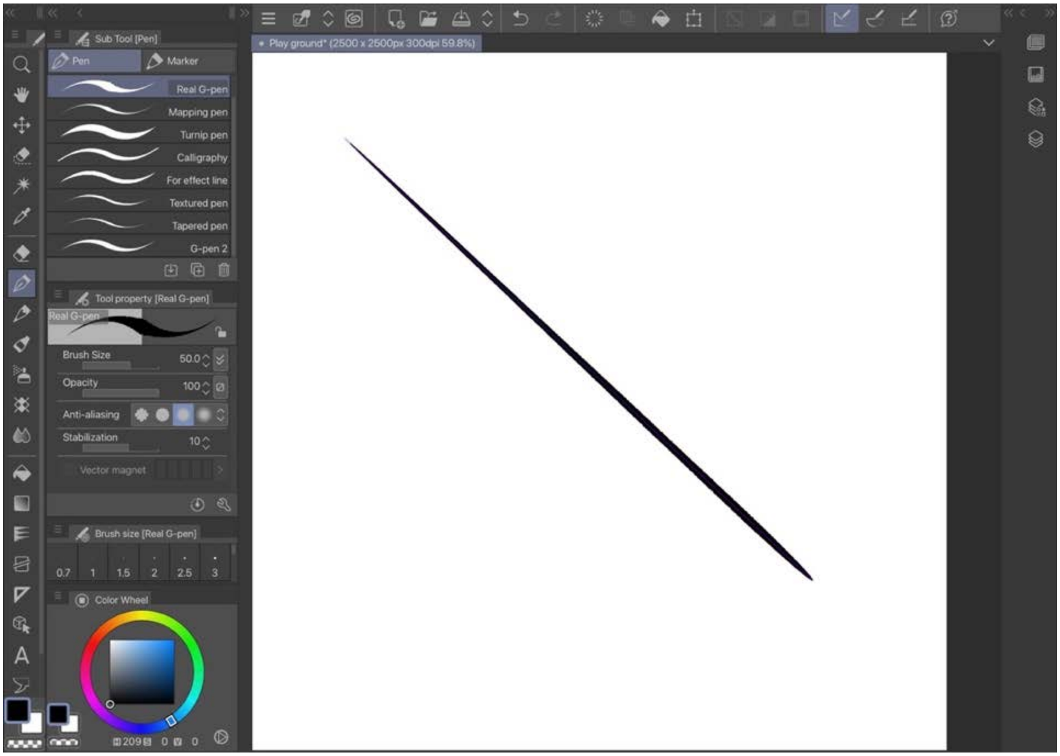


Figure 13.4 – Screenshot of inking on a Linear ruler line

> **Tip**
> Need to adjust a ruler line that you already made? Use the **Operation | Object** sub tool and select the ruler. A bounding box will show up around the ruler and a handle will appear on either end. Using this bounding box and the handles on either end, the angle and length of the ruler can be changed, the ruler can be resized, and it can even be rotated!

You can draw a smooth, straight line with your G-pen thanks to the Linear ruler's help. How about trying out a curved line? Read on to find out more.

Curve ruler

The curve ruler's name is a little bit misleading because it can be used to make polyline straight-line rulers as well as rulers with smooth curves, as shown in the following screenshot:

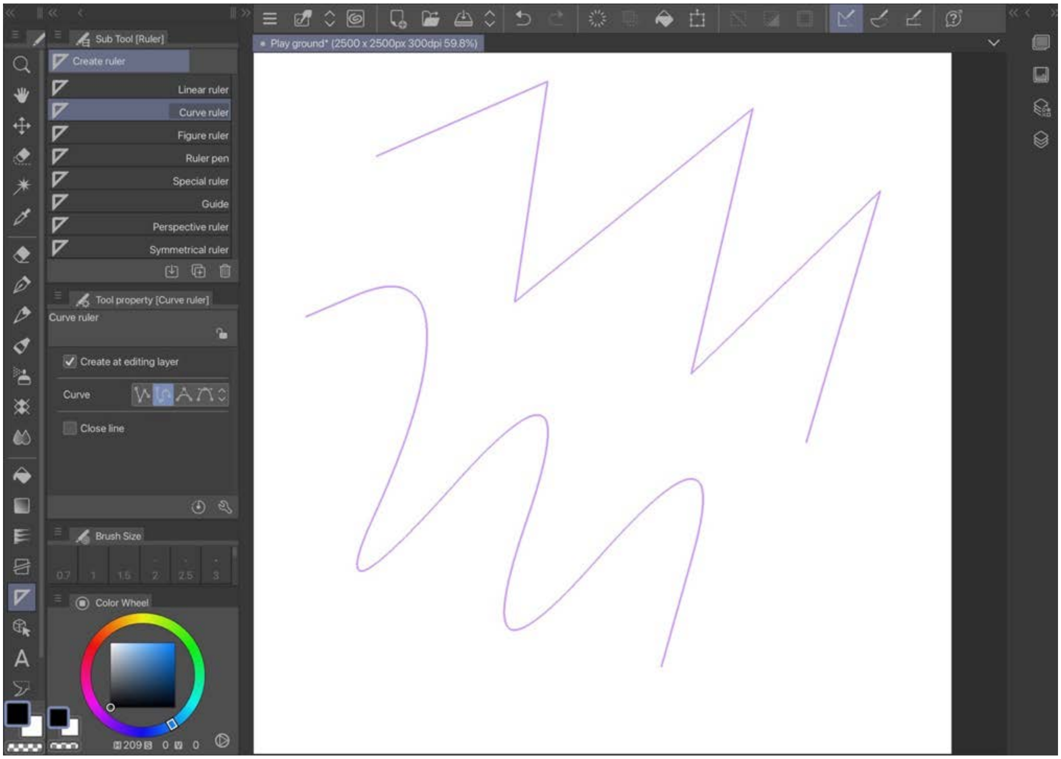


Figure 13.5 – Screenshot of curve ruler examples

To use the curve ruler, select it from the **Ruler** sub tool palette. In the **Tool Property** palette, you will see four options under the **Curve** setting. The very first icon is the **Straight** line. It will produce straight lines between the points of your ruler, and the second option is the **Spline** setting, which will create curves between each point of the ruler. To use either of these options, simply click on the point on the canvas where you want the ruler to start. Then, click again where the second point should be. Continue clicking on each corner of the ruler until you reach the end of where you want the ruler to be. Double-click to end the ruler.

You can also go all the way around to the point where you started the ruler and click on the first point to end it, if you are making an enclosed shape, as shown in the following screenshot:

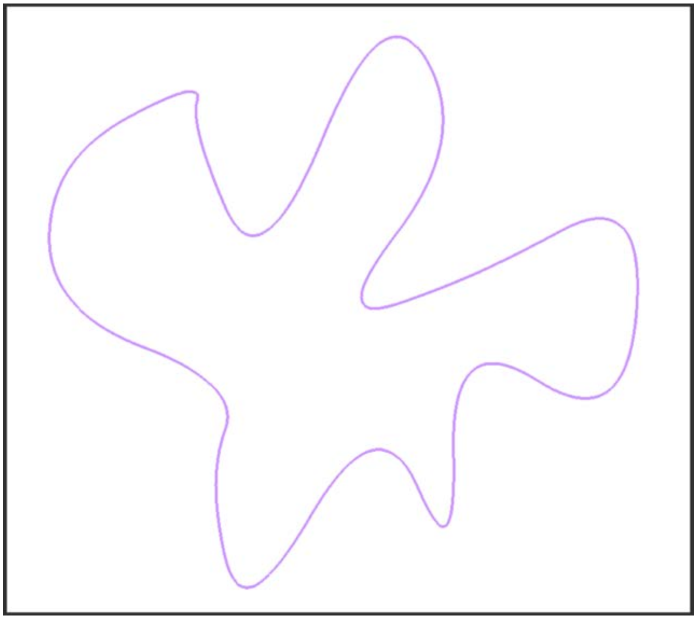


Figure 13.6 – Screenshot of an enclosed shape

The final two icons under the **Curve** setting in the **Tool Property** palette are **Quadratic Bezier** and **Cubic Bezier**, which are simply two alternate ways to make and control the curve of the ruler. Let's learn how to create curves using each of these methods.

Using Quadratic Bezier

Using the Quadratic Bezier creation for a ruler takes a little getting used to, and usually, some refinement after the initial points are laid out. Follow these steps to create a curve ruler with Quadratic Bezier:

1. Select **Curve ruler** and then the **Quadratic Bezier** option from the **Tool Property** palette.
2. Click on the canvas once, at the point where you'd like the ruler to start.

3. Click on the point where you would like the ruler to start curving. This will create a small square handle at the clicked point.
4. Move the cursor to another point on the canvas. The line of the ruler will bend according to where the second click was placed and where the cursor is now.
5. Continue clicking to add boxes and curves to the ruler until it is the desired length. Double-click to end the ruler.
6. To adjust the ruler, select the **Operation** tool | **Object** sub tool. Click on the ruler to select it and reveal the handle controls. In the following screenshot, the control handles are on the straight lines and the actual ruler is the curved lines:

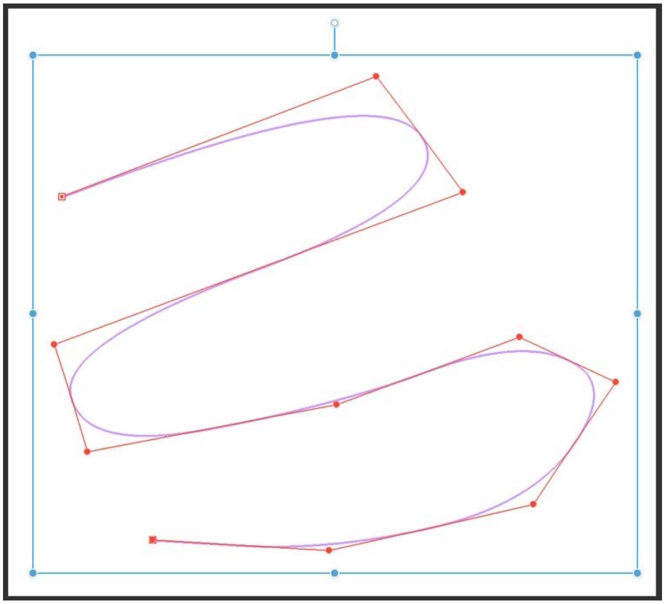


Image 13.7– Screenshot of a Quadratic Bezier example

7. To adjust the curve of the ruler, use the **Object** sub tool to click on one of the dot handles on the control line and drag it to a new position. The ruler in the preceding screenshot has been modified in the following screenshot:

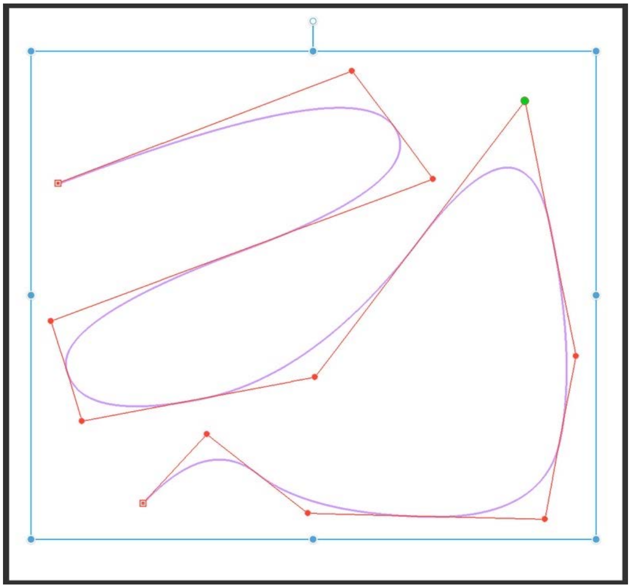


Figure 13.8 – Screenshot of a Quadratic Bezier example adjusted

Let's look at the slightly different method of drawing a curve line using Cubic Bezier.

Using Cubic Bezier

Another option for making curves is using the **Cubic Bezier** setting. Follow these steps to create a ruler using Cubic Bezier:

1. Select the **Cubic Bezier** setting from the **Tool property** palette of the curve ruler.
2. Click on the first point of the ruler.
3. When clicking to add the first curve, hold down the mouse button or stylus and drag the mouse in the direction your line is going. For example, if you are starting on the left side of the canvas and heading toward the right, drag and hold down the mouse button or stylus while dragging to the right. Going in the direction of the line will prevent the control handles from getting reversed and making "snarls" in the line. The line between the two clicked points will curve.

4. Click on a third point and drag with the mouse or stylus while holding down the button to continue making the curve.
5. To end the ruler, double-click on another point. In this mode, the ruler will end at the point created before the double-click, so be sure the ruler is as long as necessary and click on the endpoint, then double-click to finish the ruler.
6. To edit the Cubic Bezier ruler, select the **Operation** tool | **Object** sub tool. Click on the ruler to reveal the control handles. The control handles are shown by the red lines in the following screenshot:

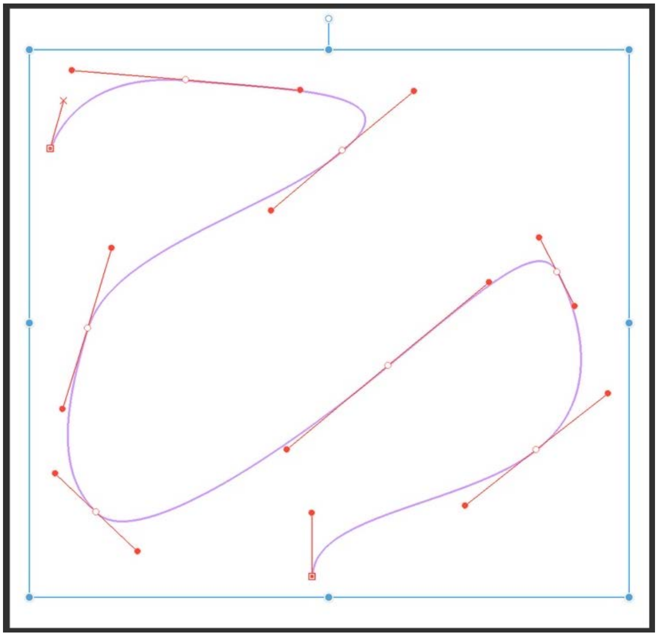


Figure 13.9 – Screenshot of a Cubic Bezier example

7. Using the **Object** tool, the handles along the red lines can be used to adjust the individual curves by clicking on the handles and dragging them. Clicking on the red squares that appear at the control points allows us to adjust their position. Dragging the red dot handles on either end of the red control line allows us to change the curve on either side of the control point.

Now that we know how to make curved lines using the Quadratic Bezier and Cubic Bezier options, we'll move on to ready-made figure rulers.

Figure ruler

The Figure ruler allows us to create easy circle, rectangle, and polygon rulers with a few simple clicks. Follow these steps to use the Figure ruler:

1. Select the **Figure ruler** sub tool.
2. In the **Tool property** palette, select one of the shapes from the Figure tool.
3. Click on the canvas and hold down the mouse button or stylus. Drag to create the selected shape ruler on the canvas.
4. When using the polygon figure option, the number of vertices can be adjusted to create shapes such as triangles, pentagons, and hexagons. To edit the number of vertices, select the ruler and then click on the **Show Sub Tool Detail Palette** icon at the lower right of the **Tool property** palette. Click on the **Figure** tool in the **Sub Tool Detail** palette. Beneath the Figure tool is the option for **Number of corners**, which can be adjusted by using the slider or clicking on the number entry box and entering a number using the keyboard. In the following screenshot, the number of vertices is `3`, which will produce a triangle:

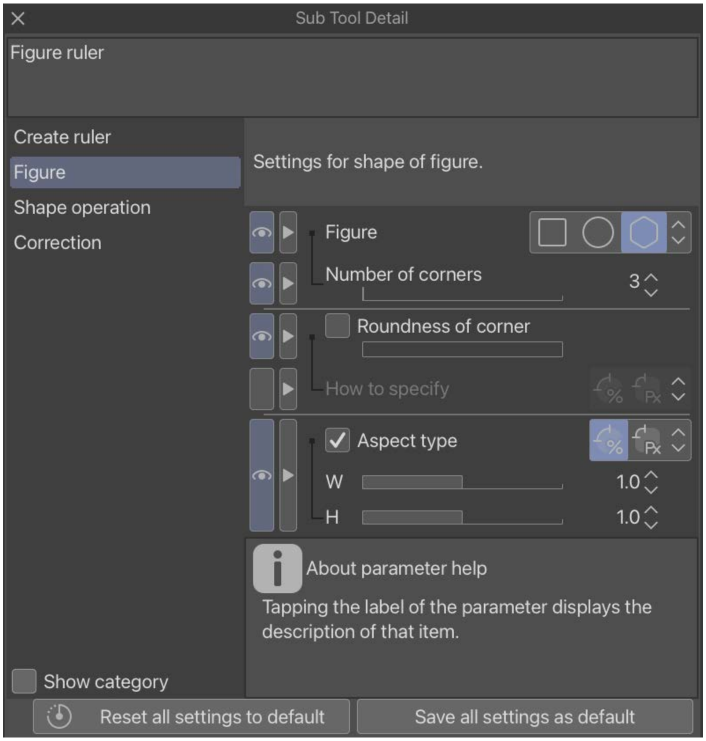


Figure 13.10 – Screenshot of the Figure ruler Sub Tool Detail palette

The final basic ruler that we will cover in this section is the versatile Ruler pen. Read on to learn more about this tool.

Ruler pen

The Ruler pen is a versatile tool that allows us to draw a ruler of any shape. In the following screenshot, I have created a ruler of a free-hand drawing bird shape with the ruler pen:

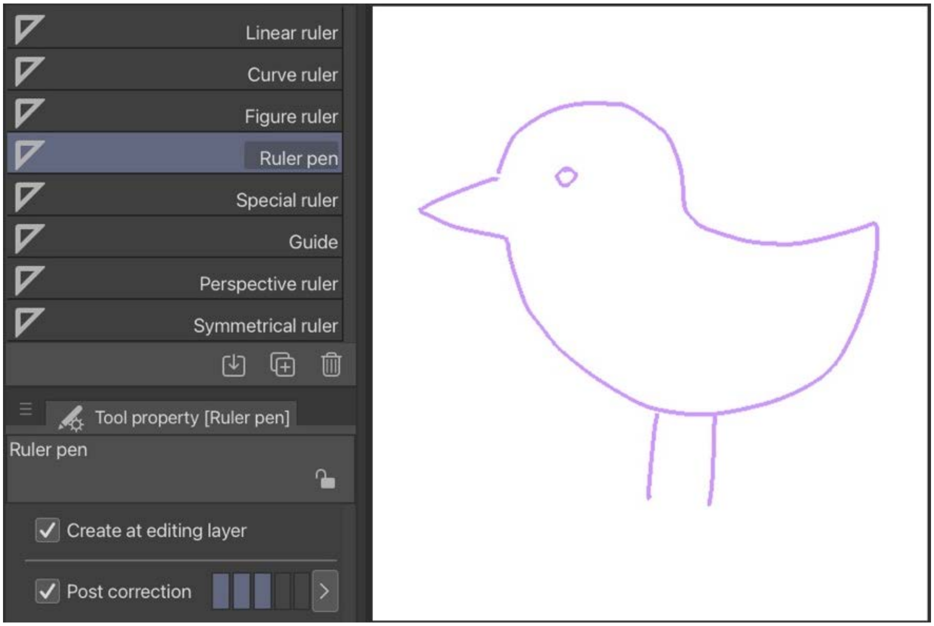


Figure 13.11 – Screenshot of a Ruler pen example

To use the Ruler pen, follow these steps:

1. Select the **Ruler pen** sub tool from the ruler sub tool palette.
2. Use the mouse or tablet stylus to draw your desired ruler. Releasing the mouse button or stylus will end the ruler automatically.

Now any drawing tool can be used to trace the ruler!

We have covered how to snap to rulers and basic rulers such as the ones to create lines, curves, and figures, and even covered how to create a hand-drawn ruler! Now we will move on to specialty ruler tools in the following sections.

Using the symmetry ruler

Have you ever wanted to create a design that was perfectly symmetrical on both sides, or make a beautiful digital mandala? If so, the symmetry ruler is the answer to your prayers. As a bonus, it's really simple to use!

To begin using the symmetry ruler, select the **Ruler** tool from the toolbox and then select **Symmetrical ruler** from the sub tool palette. The **Tool property** palette is shown in the following screenshot:

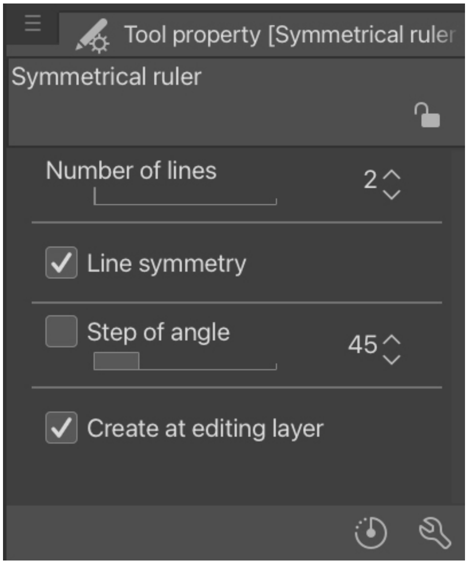


Figure 13.12 – Screenshot of the Symmetrical ruler tool property

The most important option here in the **Tool property** palette is the **Number of lines** option. This controls how many sides of symmetry there will be in the completed ruler. Any number from 2 to 16 can be used in this option. The following is an example of a ruler with **Number of lines** set to 2:

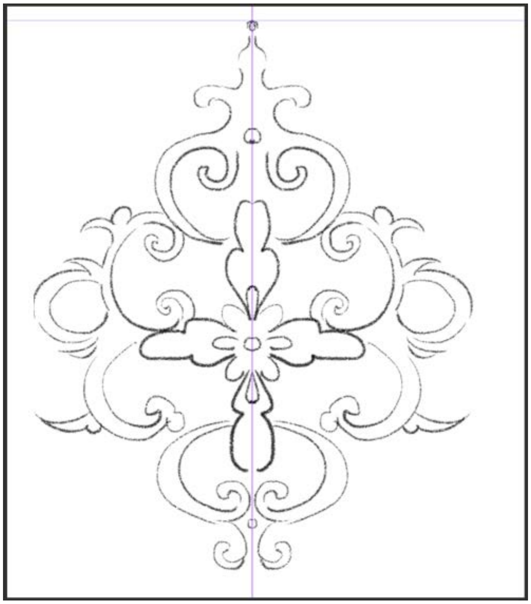


Figure 13.13 – Screenshot of a two-line symmetrical ruler drawing

The thin purple line in the center of the design is the ruler, and the design is mirrored on each side of the ruler's line. The following screenshot is a design drawn with **Number of lines** set to `8`:

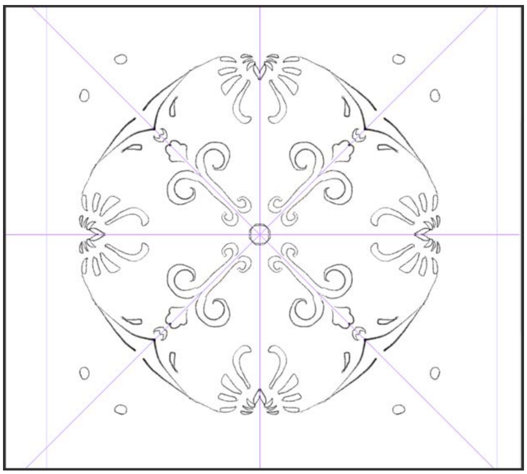


Figure 13.14 – Screenshot of an eight-line symmetrical ruler drawing

The design now has eight symmetrical parts that radiate out from the center of the ruler. The following screenshot shows a design made with 16 lines, the maximum number a Symmetrical ruler can have in Clip Studio Paint:

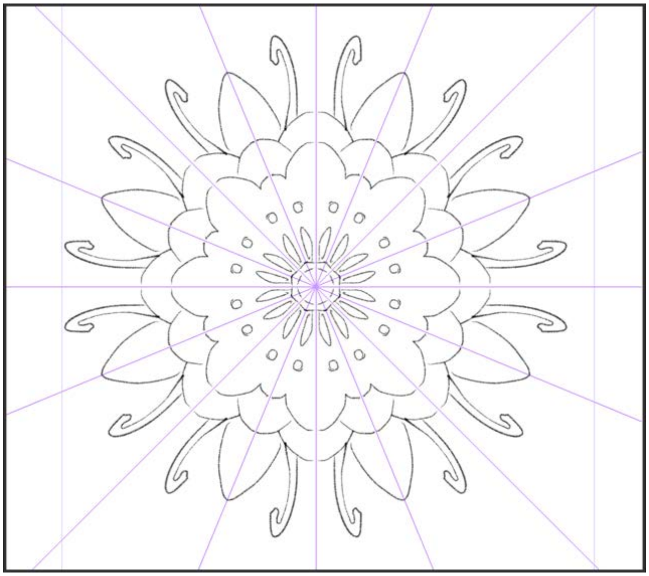


Figure 13.15 – Screenshot of a 16-line symmetrical ruler drawing

Creating a Symmetrical ruler is easy and can be done by following these steps:

1. If desired, sketch a rough layout of the design before creating the ruler.
2. Select the **Symmetrical ruler** sub tool from the ruler tool.
3. Set the desired number of lines in the **Tool property** palette.
4. Click and hold on the image canvas. While still holding down the mouse or stylus button, drag across the canvas to create a line. To constrain the ruler line to be perfectly straight or at a 45-degree angle, hold down the *Shift* key on the keyboard as you drag the mouse or stylus.
5. Release the mouse or stylus to finish creating the ruler.
6. Ensure that the **Snap to Special Ruler** icon in the top Command Bar is active in order to use the ruler.

> **Tip**
> Instead of holding down the *Shift* key to constrain the angle of the ruler, the **Step of angle** option can be used in the **Tool property** palette. Simply check the box next to the option and then set the desired angle using the slider or text entry.

Now that we know how to create and use a symmetrical ruler, let's learn about some more of the specialty rulers and how to use them.

Radial and parallel line rulers

Mostly, manga is in a black and white tone, so the lines must be bold and should clearly show actions, as well as the point on which the reader should focus their attention, hence the striking linework. One way that many manga artists do this is by using parallel lines to show motion, and radial lines to lead the reader's eyes to the point of interest in a frame or, in some cases, to express the impact of objects hitting each other. Clip Studio Paint comes with rulers ready to make parallel and radial lines already in it, making the process of creating these effects much easier than with pen and paper.

Let's look at the following page from my manga adaptation for *A Midsummer Night's Dream*, for some examples of how to use radial and parallel lines in a comic:

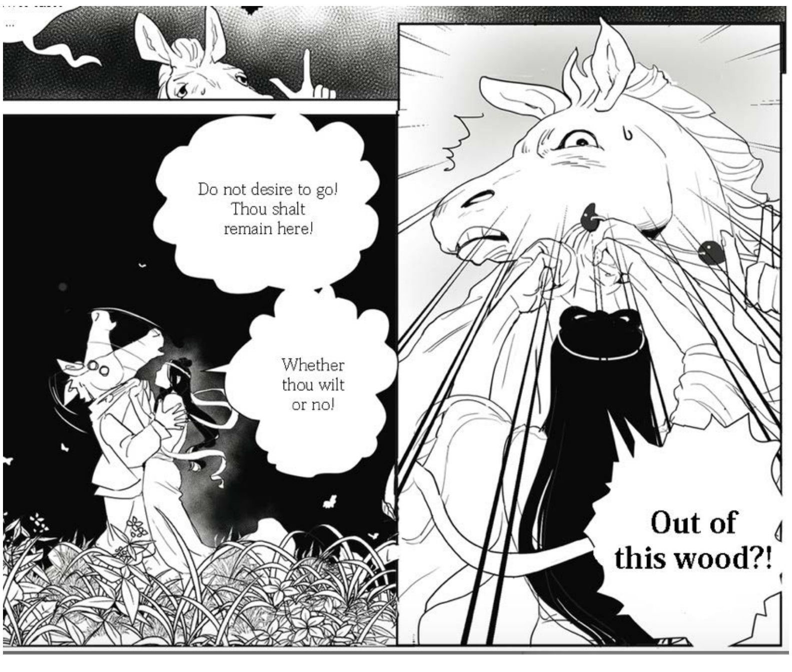


Figure 13.16 – Screenshot of a manga with focus and parallel lines

In the left panel, parallel lines are used to show the motion of Bottom's head swung by Titania, who grips and shakes him. In the right panel, radial lines are used to draw the reader's eyes to the shocked face of Bottom.

Let's look at how to create and use the radial line ruler.

Radial line ruler

The radial line ruler allows us to set a central point and then draw lines that radiate out from that point. Using the snapping feature of Clip Studio Paint's rulers, making radial lines is much quicker and easier than making them in the traditional way with pen and paper. Simply set your central point and start drawing! Follow these steps to make a radial line ruler:

1. Select the **Ruler** tool from the toolbar, then select the **Special Ruler** sub tool.
2. In the **Tool property** palette, click on the drop-down menu to choose the **Radial line** option. The drop-down menu is shown in the following screenshot:

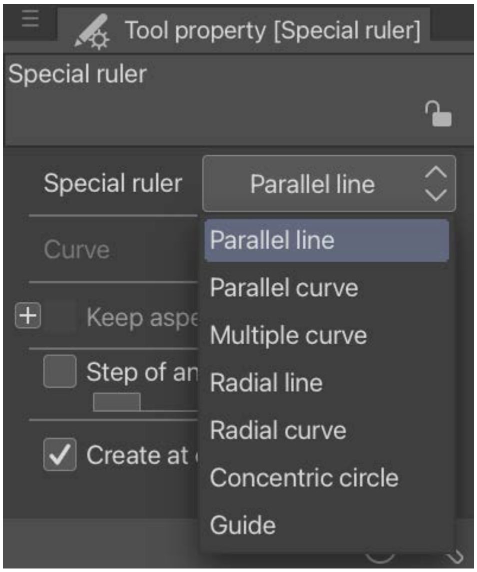


Figure 13.17 – Screenshot of the Special ruler Tool property palette

3. Click on the desired central point for the radial line. This is the point that all the lines drawn using the ruler will radiate out from.

4. Use your desired drawing tool to draw the radial lines. In the following screenshot, the focus lines have been drawn with the G-pen:

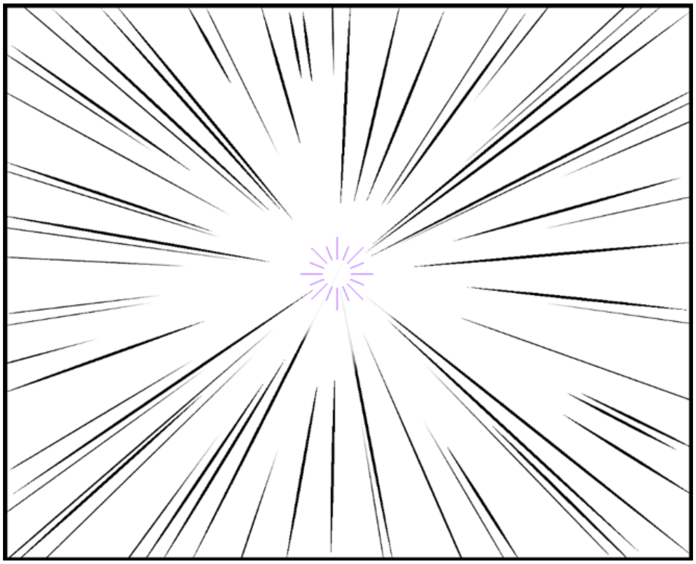


Figure 13.18 – Screenshot of a radial line ruler drawing

> **Tip**
> There are also ready-made parallel and radial lines available under the **Figure** tool. They are **Stream line** and **Saturated line** in the **Figure** sub tool palette. You can use them in the same way as creating rulers, but lines will automatically be drawn for you—what a time saver!

A radial curve ruler can also be made. With a focus curve ruler, the lines still share the same central point, but they are curved instead of being straight. Follow these steps to create a radial curve ruler:

1. Select the **Radial Curve** option from the drop-down menu in the **Tool property** palette.
2. Click where the central point of the radial curve ruler should be. Click again at the next point of the curve. Continue clicking until the desired curve is reached.
3. Double-click to end the curve.

4. Use a drawing tool of your choice to draw the focus curves. The following screenshot was done with the G-Pen tool:

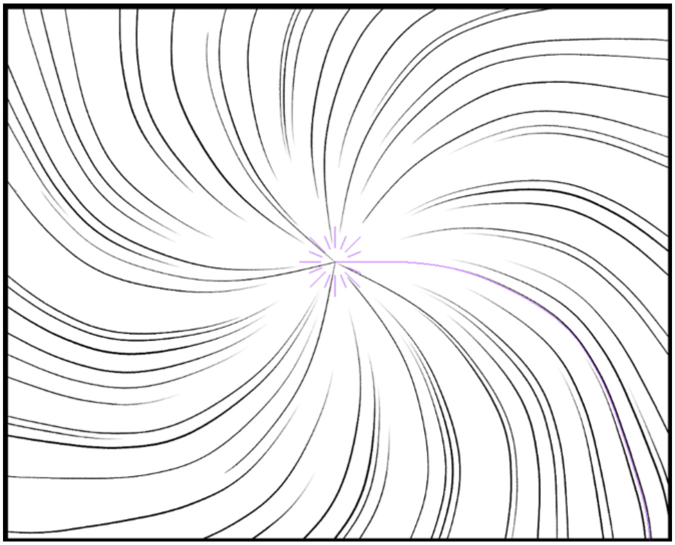


Figure 13.19 – Screenshot of a radial curve line ruler drawing

Note that the method for shaping the curve is **Spline**. For a more in-depth explanation of these curve creation methods, see the *Curve ruler* section earlier in this chapter.

Now that you know how to create focus lines, let's study the other ruler we will be covering in this section, the parallel line ruler.

Parallel line ruler

Follow these steps to create a parallel line ruler:

1. Select the **Ruler** tool from the toolbar.
2. Select the **Special ruler** sub tool.
3. From the drop-down menu in the **Tool property** palette, select the **Parallel line** option.

4. Click on the canvas and drag to set the angle of the ruler. The ruler can be constrained to straight and 45-degree angles by holding down the *Shift* key on the keyboard.
5. Release the mouse button or stylus to finish creating the ruler.
6. Use the drawing tool of your choice to create parallel lines. The following screenshot shows an example of parallel lines drawn with a ruler:

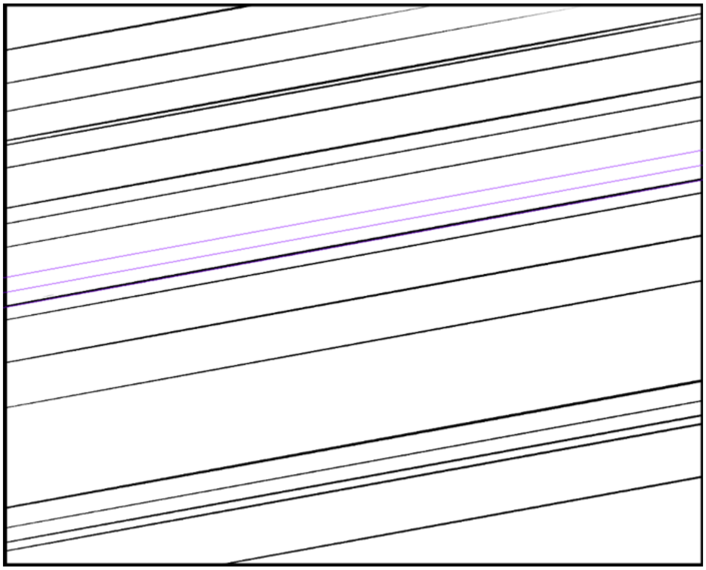


Figure 13.20 – Screenshot of a parallel line ruler drawing

As with the radial ruler we covered previously, parallel curves can also be made with a ruler. Follow these steps to create a parallel curve ruler:

1. Select **Parallel curve** from the drop-down menu in the **Tool property** palette.
2. Click on the canvas to begin the ruler. Click on the next point of the curve.
3. Select another point and click to continue the curve.
4. Continue clicking until the desired number and length of curves have been achieved. To end the ruler, double-click.

5. Use a drawing tool to draw your parallel curves. The lines in the following screenshot have been made with a G-pen tool:

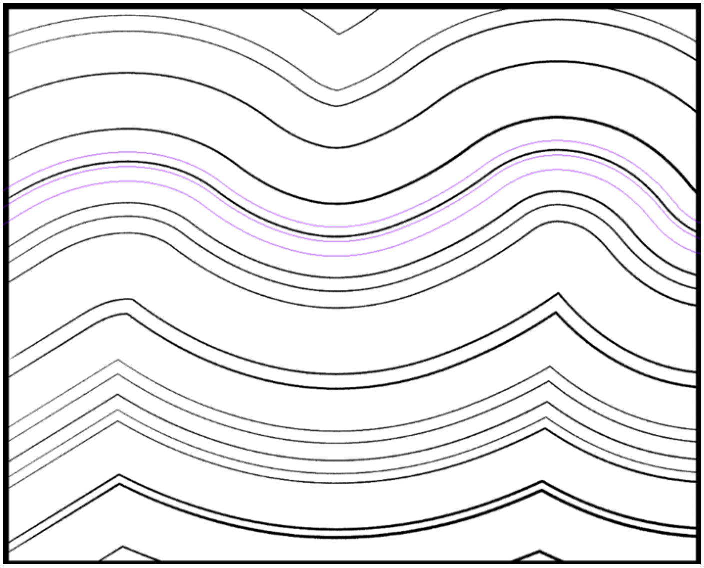


Figure 13.21 – Screenshot of a parallel curve line ruler drawing

Note that the method for shaping the curve is **Spline**. For a more in-depth explanation of these curve creation methods, see the *Curve ruler* section earlier in this chapter.

> **Tip**
> Do you need to change the angle or shape of your ruler once you've created it? Simply select the **Operation | Object** sub tool and click on the ruler to reveal the control handles. The **Object** tool can be used to move, rotate, and fine-tune your rulers.

Now that we've covered some of the advanced two-dimensional ruler tools, you can now tell the differences between linear, curve, figure, ruler pen, symmetry, radial, and parallel rulers. Let's move on to perspective drawings, which everyone is most excited about learning.

Understanding perspective rulers

In this section, we are going to look into what perspective rulers are, then understand one-point, two-point, and three-point rulers, by creating them with step-by-step tutorials, and finally learn how to use the Linear and Figure tools with perspective rulers.

Perspective rulers are a game-changer for any digital artist that draws backgrounds. Creating detailed cityscapes and backgrounds is easier than ever with the digital perspective ruler. However, having perspective rulers at your disposal will not suddenly make you an expert in perspective if you've never studied it before. Just like a real ruler in the physical world, perspective rulers are a tool that can make the drawing process easier.

Having access to a tool like the perspective rulers does not replace knowledge of and practice with drawing in perspective. If you don't know the principles of drawing with depth, then these rulers will only aid you so much. You can find many good books telling you all about how to draw backgrounds in perspective.

Perspective rulers in Clip Studio Paint can be made as one, two, or three vanishing point perspective rulers. You can also add other points as you get more comfortable with drawing in perspective, but for the purposes of this book, we'll keep it as one, two, and three points of perspective.

Let's start with the easiest perspective ruler to grasp, the one-point perspective ruler. For each of the following ruler instructions, you will need a canvas to draw on, and a rough sketch of the scene in perspective to draw. This is where that knowledge of perspective comes in! I recommend you properly place the perspective vanishing points when you create a rough sketch of the scene.

One-point perspective

As mentioned, we will start with a canvas with a rough sketch on it. For the one-point perspective, we are going to draw some buildings and a road going into the distance. For ideas, work from any references you have if you need to!

The following screenshot shows the sketch I will be basing my perspective ruler on. Having a rough sketch available makes it much easier to place the vanishing points and guidelines:

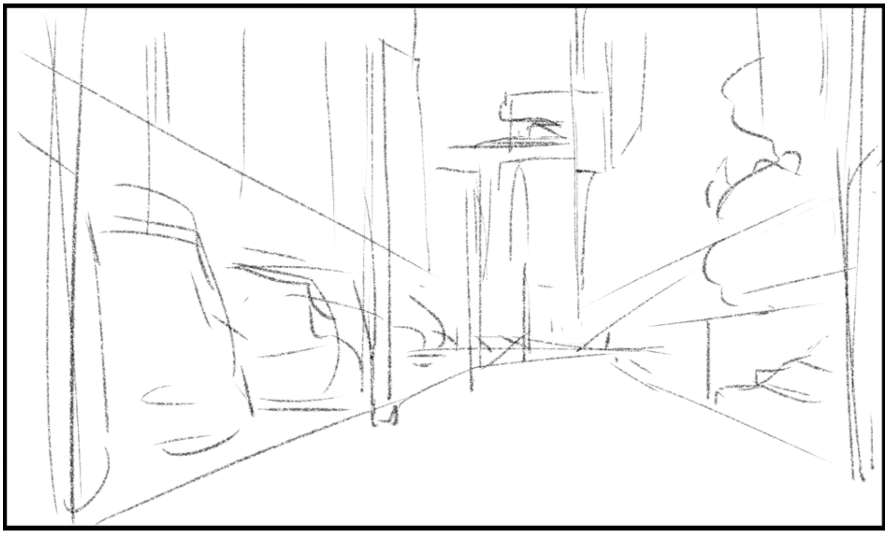


Figure 13.22 – A rough sketch of a background

Now that the rough sketch is done, we can follow these steps to make the one-point perspective ruler:

1. In the **File** menu, click on **Layer**, go to **Ruler/Frame**, and then click on **Create Perspective Ruler**.
2. The following box will appear:

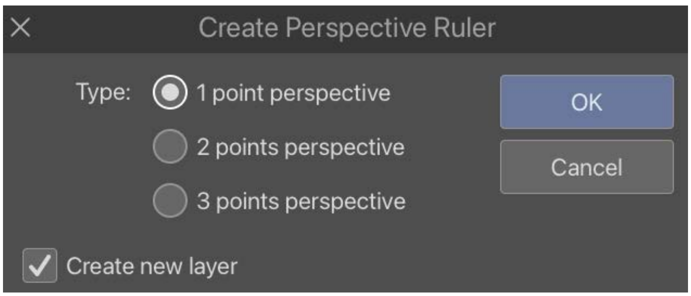


Figure 13.23 – Screenshot of the Create Perspective Ruler window

3. Select **1 point perspective** from **Type**. Leaving the **Create new layer** box unchecked will create the ruler on the currently active layer. Since we want to create a layer to refine our rough sketch above the rough sketch layer, we will leave the **Create new layer** box checked.
4. Click on **OK** to create the new ruler.
5. When the ruler is created on the canvas, the currently active tool will automatically switch to the **Object** sub tool. This will allow us to adjust our perspective ruler on the canvas.

   The following is a screenshot of the perspective ruler without the rough sketch behind it, so that it can be clearly seen. The line across the canvas from left to right is our horizon line. The two blue dots on either side of the line allow us to control the tilt of the horizon line. The circular point on the horizon line is the vanishing point for our perspective. The two lines radiating out from the vanishing point are guidelines that will help us to place our perspective ruler in the correct spot:

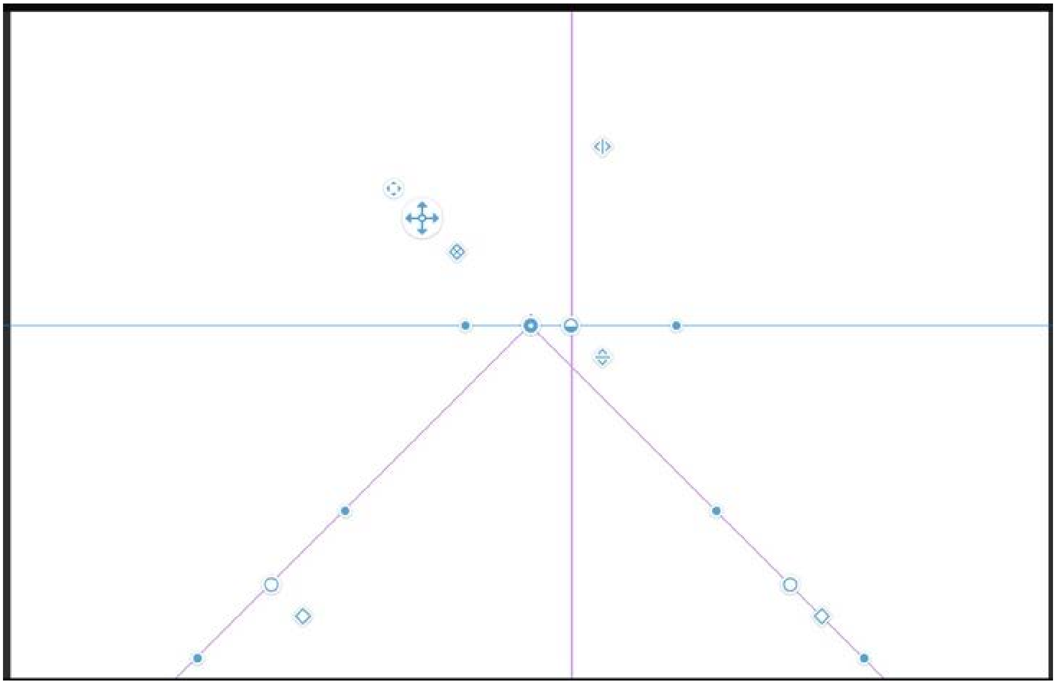


Figure 13.24 – Screenshot of one-point perspective ruler guidelines

6. Using the **Object** sub tool, click on the vanishing point and drag it so that it is in the same place as the vanishing point on the rough sketch. Ensure that the horizon line of the perspective ruler also matches the horizon on the rough sketch. The handles of the guidelines can be used to check the perspective and ensure that the ruler is in the correct position. The following screenshot shows the perspective ruler in the correct position:

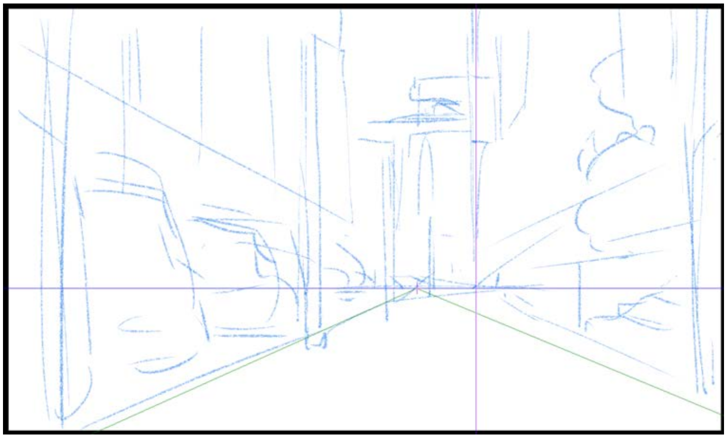


Figure 13.25 – Screenshot of one-point perspective ruler guidelines on a sketch

7. Now that the perspective ruler is in position, we will ensure that the **Snap to Special Ruler** icon in the main Command Bar is active. We can now draw in our cleaned-up scene and the drawing tools will snap to the lines of the ruler. The following are the finished pencils for this perspective scene:

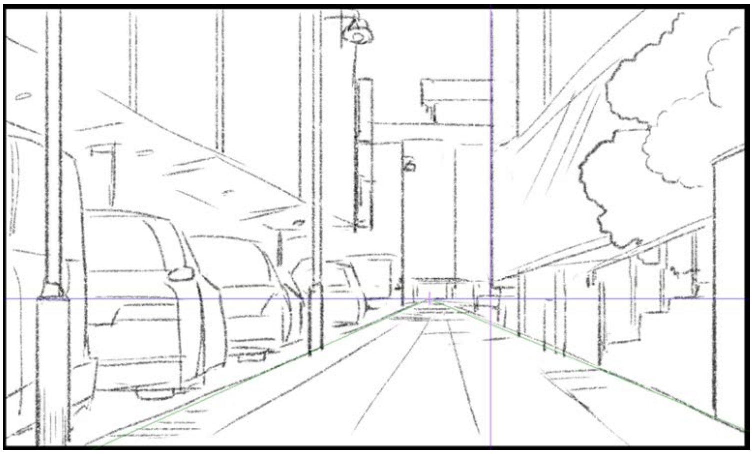


Figure 13.26 – A sketch guided by the one-point perspective ruler

8. Once the scene is sketched out, we can add another layer on top of the sketch layer to ink on and still be able to see and snap tools to our perspective ruler. In order to do this, look in the **Layer** palette. With the ruler layer selected, click on the **Set showing area of ruler** icon to open the dropdown, which you can see in the following screenshot as a triangular ruler shape just above the drop-down menu:

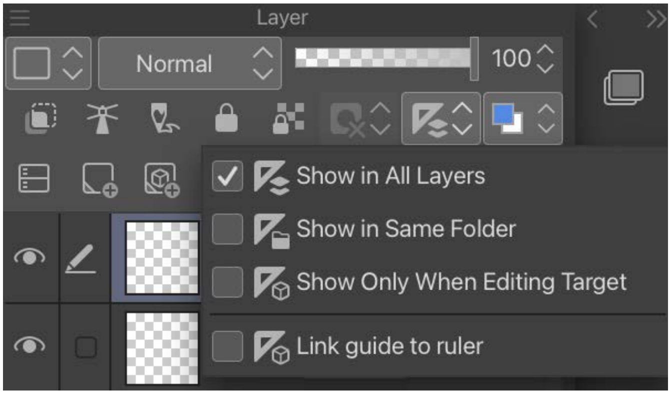


Figure 13.27 – Screenshot of the Set showing area of ruler menu option selected with the dropdown displayed

9. Set the **Show in All Layers** option, in order to see and use the perspective ruler no matter what layer is currently active.

The showing areas for the rulers are **Show in All Layers**, **Show in Same Folder**, **Show Only When Editing Target**, and **Link guide to ruler**. Descriptions for each of these options are as follows:

- When a ruler layer is set to **Show in All Layers**, the ruler will show and be able to be snapped to any layer in the current canvas.
- When set to **Show in Same Folder**, the ruler will be shown only when it is on layers that are in the same layer folder as the ruler. (For instance, if our canvas includes a folder labeled **Sketches** that has a ruler in it, the ruler will only be visible and usable when on layers grouped in that same folder.)
- When set to **Show Only When Editing Target**, the ruler will only be shown when the ruler layer is the currently active layer.
- **Link guide to ruler** links the ruler and guide created on the same layer. When turned on, rulers and guides can be moved together with the **Move layer** tool.

Now, let's have a look at a perspective ruler with more vanishing points in the next section.

Two-point perspective

Creating a two-point perspective ruler can be achieved with the same method as shown in the *One-point perspective* section of this chapter. However, additional perspective vanishing points can also be added to an existing ruler.

To create a basic two-point ruler, follow the instructions in the preceding section but select the **2 points perspective** option from the dialog box in *step 2*. To add a point to an existing ruler, follow these steps:

1. Click on the existing ruler with the **Object** sub tool to select it. If a ruler is currently selected, the control handles will be visible.
2. Select **Ruler** from the toolbar, then click **Perspective ruler** from the **Ruler** sub tool palette. Confirm **Add vanishing point** is selected on the **Process** drop-down menu in the **Tool property** palette, as in the following screenshot:

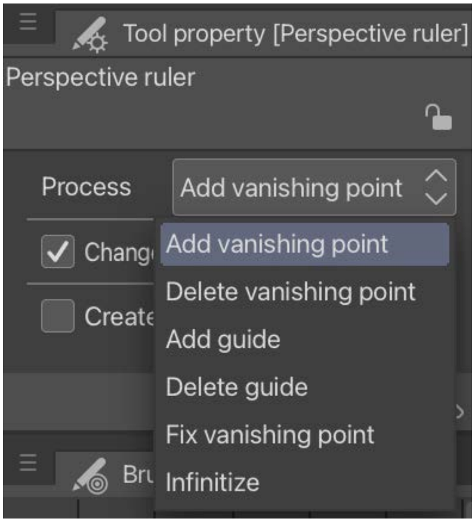


Image 12.28 – Screenshot of the perspective ruler Tool property palette

3. On the canvas, click where you want to add a new vanishing point.

As you can see from the screenshot in *step 2*, the perspective ruler **Tool property** palette has several options in the **Process** drop-down menu that can assist us with drawing perspective rulers. We have already covered the **Add vanishing point** option, and the following list describes the rest of the perspective ruler tools available in this palette:

- **Delete vanishing point** will delete the currently selected vanishing point.
- **Add guide** will create a new guide coming from the current vanishing point.

- **Delete guide** will delete the selected guide from the vanishing point.
- **Fix vanishing point** locks the selected vanishing point to its current position.
- **Infinitize** moves the vanishing point to infinity when selected.

Now you can create multiple vanishing point perspective rulers. Let's look into how to create a three-point perspective drawing with a perspective ruler.

Three-point perspective

Once you have mastered one- and two-point perspectives, you can start creating some very cool scenes using three-point perspective. Scenes created in three-point perspective look flashy and cool and really add a feeling of three-dimensional space to your comic scenes. The following is an example of a three-point perspective cityscape from my work:

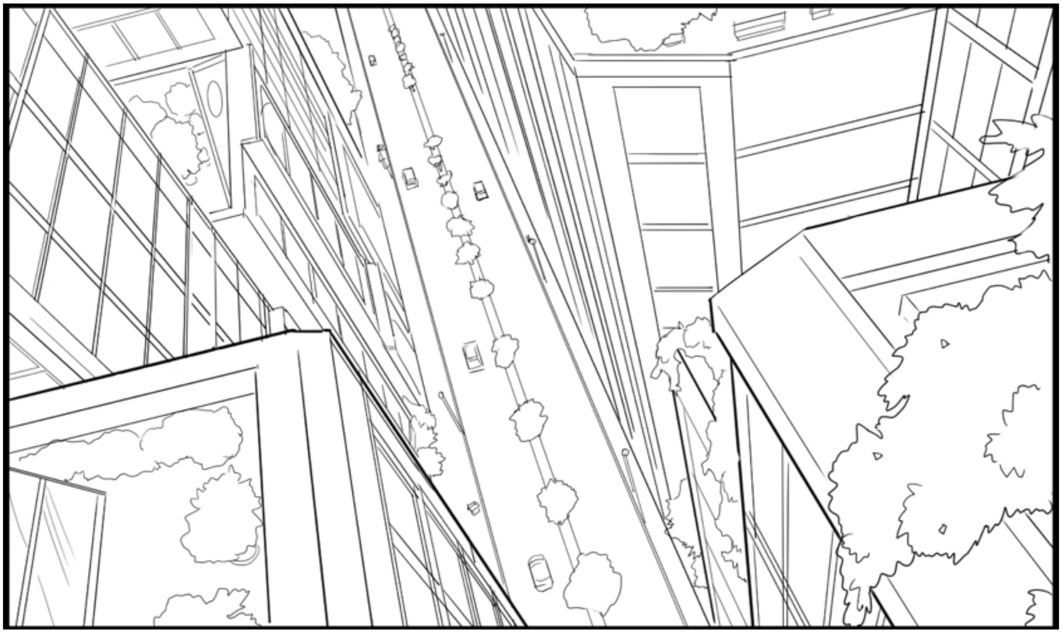


Figure 13.29 – Background drawing by using a perspective ruler

By zooming out, we can see how the perspective ruler was set up to create this bird's-eye view of a city. The following is the zoomed-out view of the page with the perspective ruler showing. Note how far away the vanishing points are from the edges of the canvas:

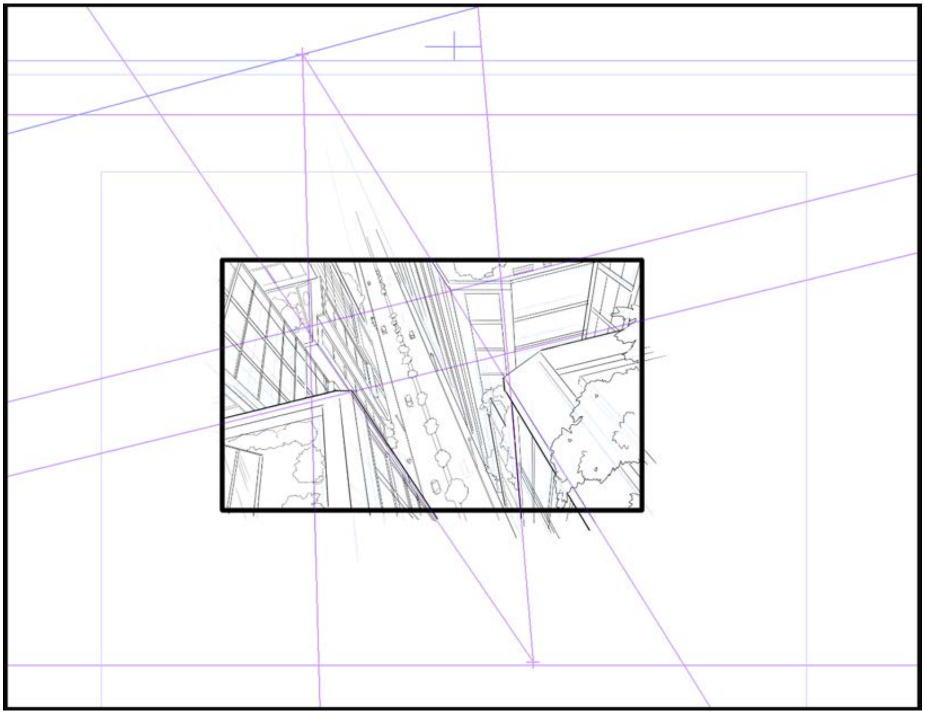


Figure 13.30 – Background drawing with vanishing points

Three-point perspective rulers can be created by using either method described in the one-point and two-point perspective sections of this chapter. They are trickier to work with, since there are so many points that the program is trying to snap to. Sometimes the program may pick up on the wrong guideline and you may have to undo your line and try again. But once you master them, they are an invaluable part of drawing really cool environments for your characters to inhabit.

Before we get away from perspective rulers, did you know that you can draw perfect ellipses and other shapes with them? Let's learn more in the next section!

Using figure and line tools with perspective rulers

Did you know that you can use shape and line tools with perspective rulers? Follow these steps to use the **Direct Draw** sub tools with perspective rulers:

1. Using one of the methods listed previously in this chapter, create a perspective ruler on your canvas.
2. Select the **Figure** tool in the toolbar.
3. Select the **Direct draw** sub tool.
4. Select the **Rectangle** sub tool.
5. Ensure that the **Snap to Special Ruler** icon in the main Command Bar is active. Then, click and drag with the Rectangle tool to create a rectangle. The shape will conform to the perspective ruler automatically, so long as **Snap to Special Ruler** is active.

In the following screenshot, a circle, a rectangle, and a polygon have all been drawn in perspective using the **Snap to Special Ruler** option:

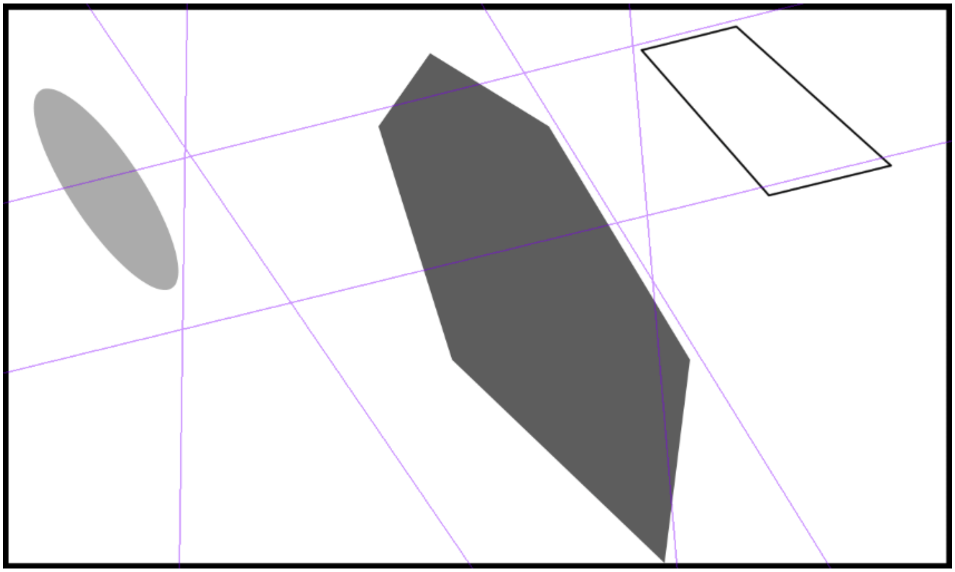


Figure 13.31 – Figure tool drawings with a perspective ruler

Using shape tools allows you to create buildings quickly by using the rectangle tool to draw the sides. Or, you can add a circular rug to the interior of a room. The straight line and curve tools will also follow perspective rulers, allowing the quick rendering of details or the creation of architectural elements such as arches.

I hope you have a better understanding of how to draw in three-dimensional space using Clip Studio Paint rulers. It is also good to know that there are one-point, two-point, and three-point perspectives, and we can create accurate guides when we draw them! Perspective rulers snap not only to drawing tools but also to figure tools, which should accelerate your object drawing speed.

There are ways to control multiple rulers to organize your canvas; let's find out how in the next section.

Making rulers inactive

In some instances, you may find it necessary to have multiple rulers in the same image. This can become confusing for the program, and for us as well! So, in this section, we will go over the quick process of making rulers and vanishing points active or inactive. This will allow us to control how rulers work and what areas of a ruler are active at any time.

Turning rulers off and on with the control handle

Making a ruler active or inactive is simple but invaluable. Knowing how to manage multiple rulers can mean the difference between a smooth drawing experience and hours of frustration fighting with your tools! Follow these steps to make an active ruler inactive:

1. Create a ruler on a new canvas. In this example, we will be looking at a concentric circle ruler, but just about any ruler tool will do.
2. Click on the ruler with the **Object** sub tool if the ruler is not already selected. The currently selected ruler will show the control handles. In the following screenshot, the control handles are the circular and diamond-shaped icons around the ruler that allow us to edit the ruler and change its shape and rotation:

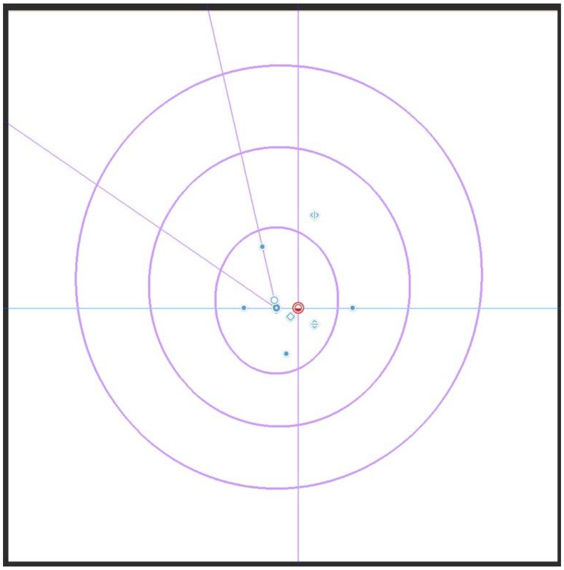


Figure 13.32 – Screenshot of the perspective ruler and figure ruler guidelines

3. Locate the control handle shaped like a diamond. In the preceding screenshot, it is located just to the right of the center of the circle ruler. Click on the diamond-shaped control handle to make the ruler inactive. The ruler will change colors from purple to green, as shown in the following screenshot:

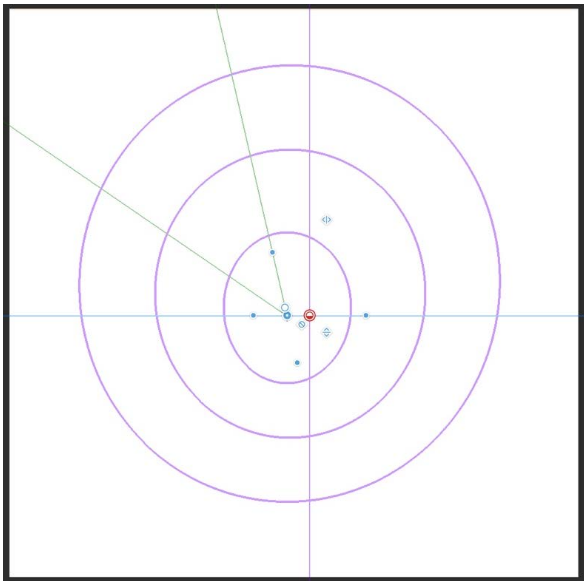


Figure 13.33 – Screenshot with one of the rulers inactive

4. To make the ruler active again, click on the circle with a slash icon. The ruler will change back to its active color and will be able to be snapped to.

This method can also be applied to individual vanishing points along a perspective ruler. In the following screenshot, the upper and left-hand vanishing points have been made inactive so that tools will only snap to the right-hand vanishing point:

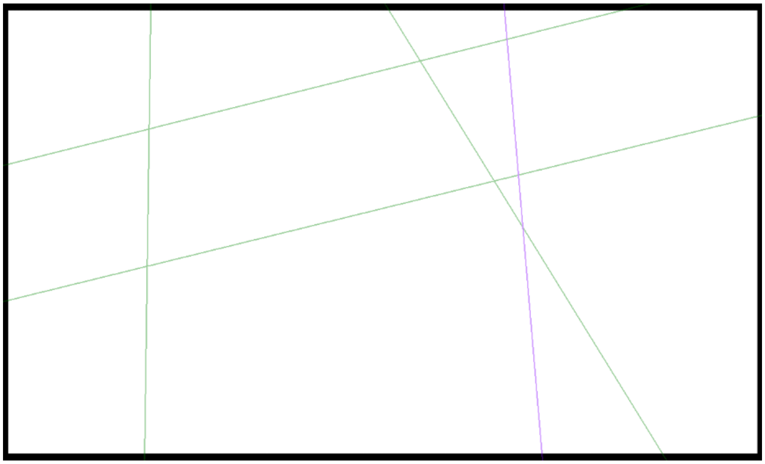


Image 12.34 – Screenshot of only one ruler active

Now that we've learned about all these specialty rulers, let's cover an often-overlooked tool that can save you from a headache and save a lot of time as well if you know how to use it.

Using grids and guides

Many new users of Clip Studio Paint don't know that the software comes with a customizable grid that can be shown or hidden, or that you can create guides in the program as well. Grids and guidelines are handy for many tasks, of course, and provide a visual measurement that is easy to count and divide. Also, the grids and guidelines in Clip Studio Paint can be snapped to, making it very easy to get elements lined up precisely as they need to be.

In this section, we will learn how to show and hide the grid and how to make guidelines.

Showing and hiding the grid

Before we learn how to show and hide the grid, let's take a look at the preferences that control its appearance. We covered them a little bit in *Chapter 2, Installing Clip Studio Paint Pro and Interface Basics*, but let's give them another look now.

To access the preferences, go to **File** in the main menu on a PC, or click **Main menu** on Mac, then click on **Preferences**. In the left-hand menu of the **Preferences** menu, click on the **Ruler/Unit** option:

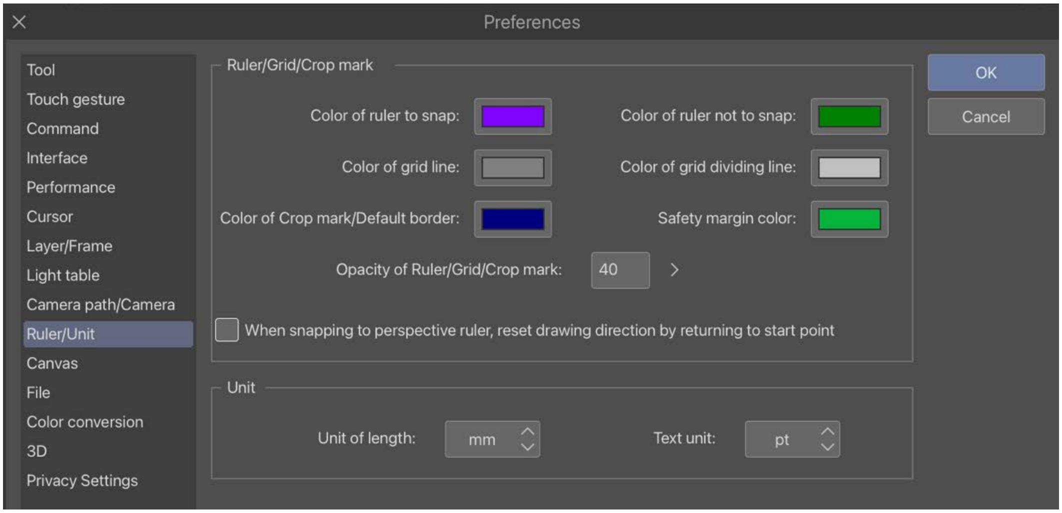


Figure 13.35 – Screenshot of the Ruler/Unit preferences

From here, we can change the color and the opacity of the grid-dividing lines. **Color of grid line** controls the primary division of the grids and can be set by clicking on the color swatch to the right of the option and selecting a color from the color picker. **Color of grid dividing line** controls the sub-division lines that are present between the larger grid lines.

To see the grid in action, let's look at the following screenshot:

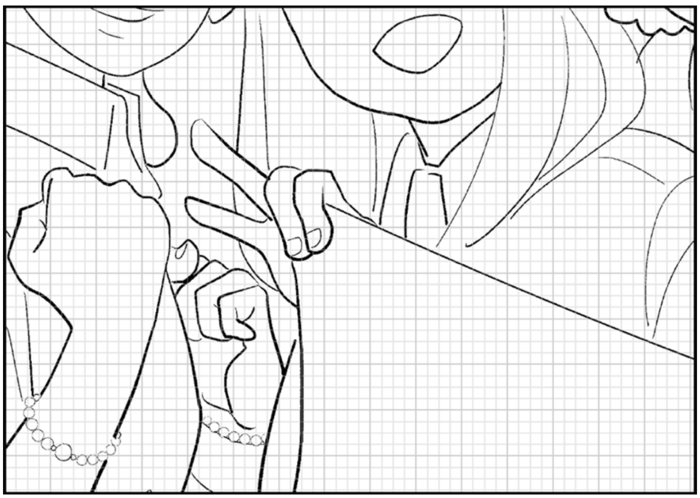


Figure 13.36 – Screenshot of the canvas with a grid

Looking closely, we can see that some of the lines are darker. These darker lines are our grid lines. Between each grid line are three grid-dividing lines that break each larger square of the grid up into four sections in each direction, giving a total of 16 squares between each line of the grid. The color of these lines can be changed, as discussed previously.

Follow these steps to show the grid on your own work:

1. In the **File** menu, or on the top menu bar on Mac, click on the **View** option.
2. Click on **Grid** to show the grid.
3. To hide a visible grid, click on **View** and then click **Grid** again to uncheck the option.

The grid is also adjustable by changing its settings; read on to find out how!

Adjusting grid settings

In addition to the grid color settings in **System Preferences**, there are also grid settings that allow us to change grid divisions. These settings are accessible by clicking on **View** in the **File** menu and then clicking on **Grid/Ruler Bar Settings…**. The grid/ruler settings menu is shown in the following screenshot:

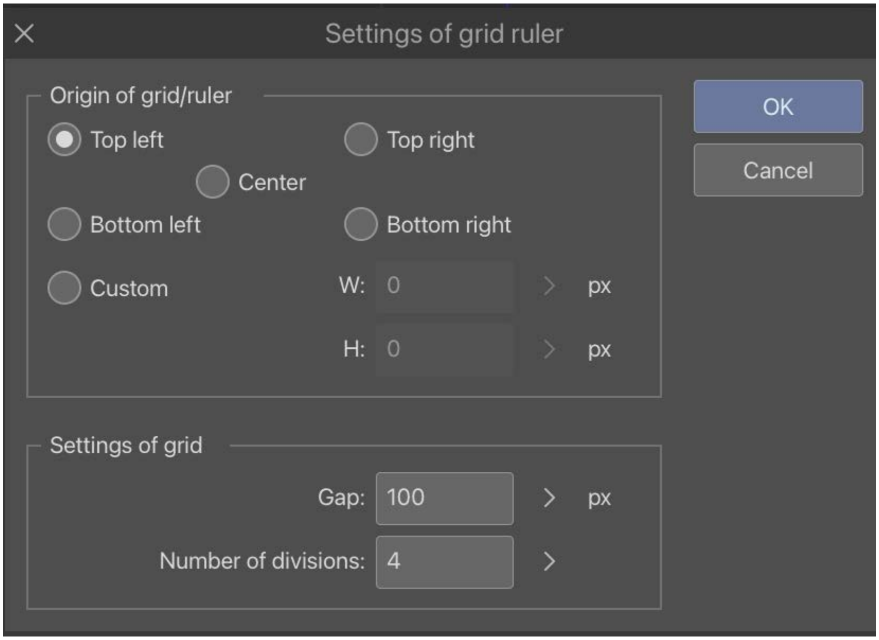


Figure 13.37 – Screenshot of settings of the grid ruler

In **Origin of grid/ruler**, the point of origin of the grid can be set. By default, it is set to the top left, meaning that the grid will appear with its origin at the top-left corner of the canvas. The other options for the point of origin are **Top right**, **Center**, **Bottom left**, and **Bottom right**. There is also an option to set a **Custom** point of origin. Clicking the radio button next to the **Custom** option will activate the text entry box, and custom values for the number of pixels of offset for both the width and height of the document can be set. For instance, if a value of `10` is entered in **W** and a value of `20` in the **H** setting, then the point of origin for the grid will be 10 pixels in from the left side and 20 pixels down.

Under **Settings of grid**, the **Gap** and **Number of divisions** options can be set. **Gap** is the space between the grid lines, which is set to **100** pixels in the preceding screenshot. **Number of divisions** is the setting for how many times the larger grid lines should be divided. Setting this to a higher number will result in smaller squares occurring in the grid overall because of the additional divisions.

Let's look at another ruler that is easy enough to use for your creation.

Making guides

Guide rulers are simple to use but their applications are endless. They can be used in combination with a grid to mark the margins of a document, to find the center of a canvas, or to align design elements such as different layers of text and illustrations.

Guides work like the line ruler sub tool, but a guide can only go straight horizontally or vertically on the canvas. Follow these steps to make guidelines on your canvas:

1. Click on the **Ruler** sub tool in the toolbar.
2. Click on the **Guide** sub tool.
3. Click on the canvas and drag either horizontally or vertically, depending on in which direction you want your guide to go.
4. When the mouse button or stylus is released, the guide will be made.

> **Tip**
>
> Guides automatically continue all the way across and beyond the constraints of the canvas, no matter the length of the line that was dragged to create them.

Grids and guides are really easy to use, so it's great to know that these rulers are available whenever you need them to draw straight lines!

Summary

Wow, that was a lot of information about rulers! I hope that you learned some great new tips and tricks that will help you with your digital art creation in the future.

In this chapter, we learned how to work with the basic rulers of Clip Studio Paint, as well as the radial, parallel, and symmetry rulers. We created one-point, two-point, and three-point perspective rulers, and learned how to use the direct drawing tools with them. We learned how to make rulers active or inactive and how to use the snapping settings. Finally, we learned about grids and guides. In this chapter, you gained skills such as creating various rulers by yourself, then manipulated and used perspective rulers, as well as using them with Figure tools, and used grids and guides, even organizing them as you want. Background drawings won't scare you anymore now that you know about rulers.

In the next chapter, we're going to enter a new dimension: the third dimension! Keep reading to learn more about how to use 3D figures and objects in Clip Studio Paint.

14
Using 3D Figures and Objects

Clip Studio Paint is one of the leading pieces of software for creating top-notch manga and illustrations. But did you know that it can also import and display 3D assets? Many 3D assets come ready in the Material palette and can be applied to your page. While I usually use 3D assets as poses or background references, you could conveniently use 3D characters and imported 3D assets to create an entire manga.

In this chapter, we'll take a trip into the third dimension and learn about the following topics:

- Introducing the 3D Material palette
- Loading a 3D object onto the canvas
- Moving an object in 3D space
- Using preset poses on figure models
- Customizing character and figure models
- Saving 3D information to the Material palette
- Importing 3D models into Clip Studio Paint

We are going to look at 3D materials closely and learn how to apply them to your canvas and then customize them as per your need. Finally, we will learn how to save and import them. Do you think it's cheating to use 3D materials to trace the posing or to use them as a reference when you ink? No, by doing so you can have a deeper understanding of how to depict 3D objects in a 2D drawing!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and a new canvas opened with a white-colored paper layer. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

Introducing the 3D Material palette

First of all, we are going to look at the 3D assets in the Material palette. The Material palette is what we call the digital library of assets that are available through Clip Studio. Clip Studio comes with a huge library of brushes, images, screentones, 3D poses, objects, and more. More assets can be easily downloaded through the Clip Studio Assets, which we will cover in *Chapter 18*, *Exploring the Clip Studio Assets and Animation*. You can also save your own artwork to the Material palette, which is covered in *Chapter 10*, *Vector Layers and the Materials Palette.*

For now, we will just concentrate on the 3D categories of the Material palette. To access the Material palette, locate the appropriate palette location in your interface. If you cannot locate the Material palette, you can click on **Window** in the **File** menu and then navigate down to **Material**. From the menu under the **Material** option, click on **Material [3D]** to open the 3D Material palette, as shown in the following screenshot:

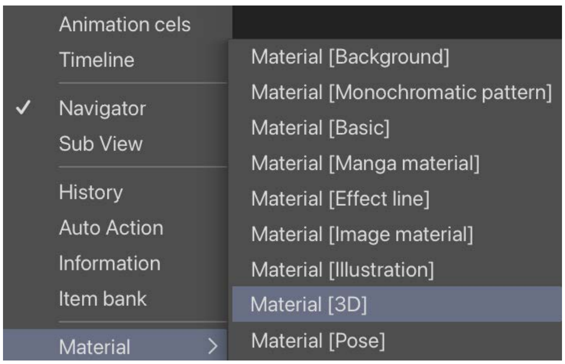


Figure 14.1 – Screenshot of the Material drop-down menu

Now, we can take a look at the **Material** palette to see the contents of the 3D category. The **Material** palette is shown in the following screenshot:

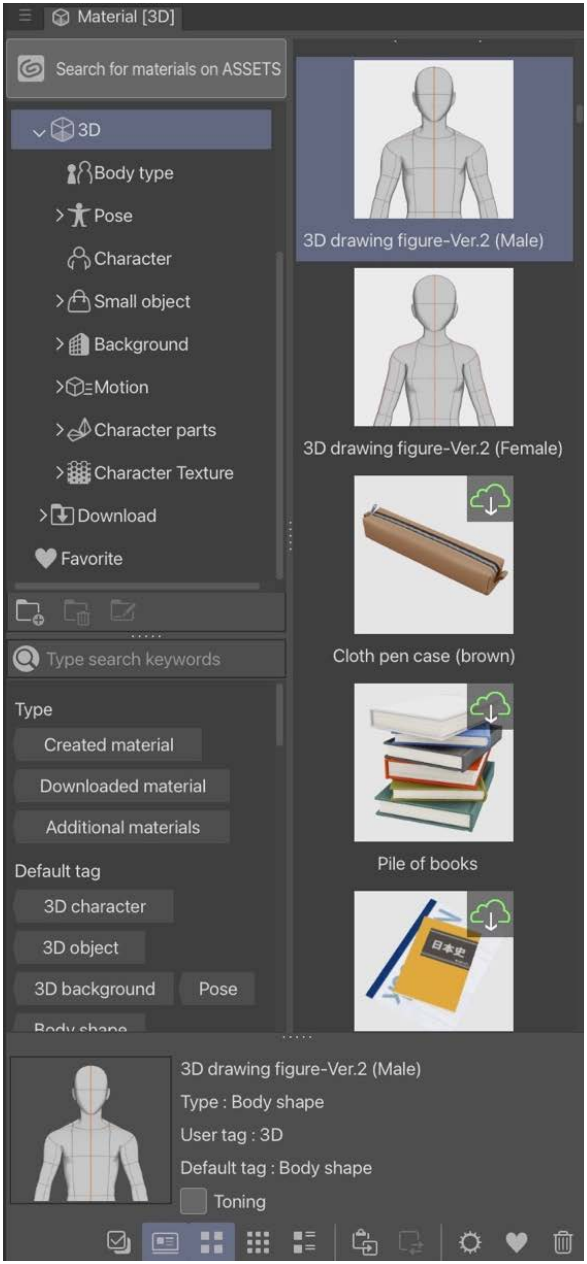


Figure 14.2 – Screenshot of 3D materials in the Material palette

On the left-hand side of the Material palette is a list of the different categories of materials and their sub-categories. These categories organize our library of material assets and allow us to quickly find a specific material. The currently selected category will show up in the list with a blue highlight around its name. Any category name with an arrow symbol next to it means that that category can be expanded to show the sub-categories beneath it.

Sometimes, even sub-categories have more sub-categories, as can be seen next to the **Pose** sub-category in *Figure 14.2*.

The right-hand side of the Material window shows a list of the materials with images in the library. The currently selected material will have a blue highlight around it. Details about the current selection are shown in the bottom section of the Material palette.

> **Tip**
>
> If a material in the list has a cloud icon with a down-facing arrow in the top corner of the preview image, this means that the material must be downloaded from the Clip Studio Assets before it becomes available for use. These assets are usually available at no cost to you, but they will increase the storage space Clip Studio needs on your hard drive!

Great, you found a variety of 3D assets in the Material palette! Let's move on to learn how to paste them to your canvas.

Loading a 3D object onto the canvas

Now you know there are many 3D assets available in Clip Studio Paint, but you need to import them onto your canvas to work on! In this section, we will learn how to import those 3D assets from the Material palette to your canvas, so that you can start to move or manipulate them.

Follow these easy steps to add a 3D asset to a canvas:

1. Open a new canvas, if one is not already open. Material assets can only be added to a currently opened document.
2. In the 3D Material palette, click on the 3D asset to be added to the canvas. In this example, we are using the **3D drawing figure-Ver.2 (Male)** asset.

3. Once the material is selected, click on the **Paste selected material to canvas** icon at the bottom of the Material palette, which looks like the following screenshot:

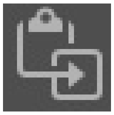


Figure 14.3 – Screenshot of the Paste selected material to canvas icon

4. The asset will be pasted to the canvas. Note that depending on your computer's specifications and the 3D asset, this may take a few minutes to complete.

The 3D figure we chose in the preceding steps is shown in the following screenshot:

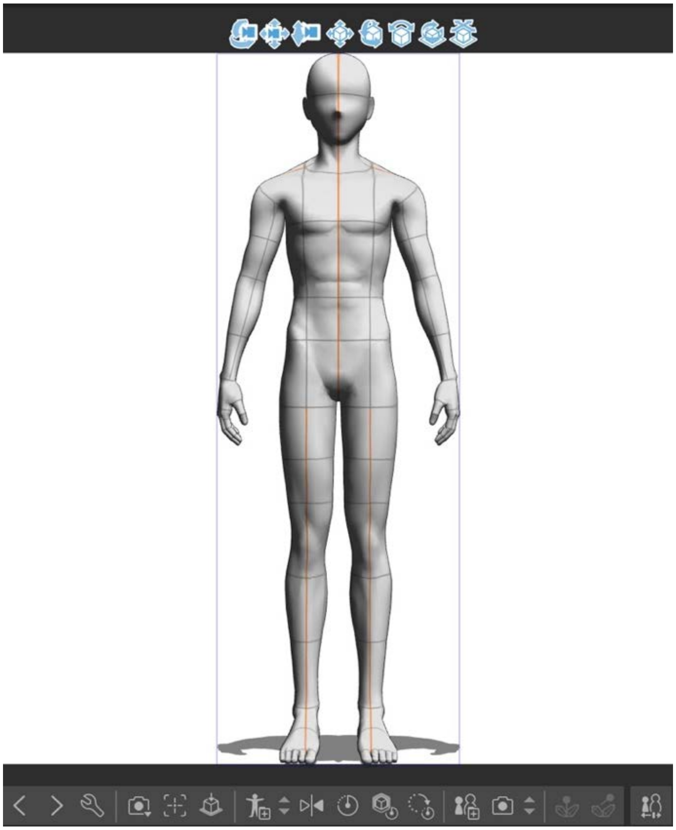


Figure 14.4 – Screenshot of the pasted 3D material

As you can see, this is a decent 3D drawing doll that makes for a pretty good reference! But this pose is a little too static, and we need to move the limbs around to get some personality and life into this reference pose. Let's move this 3D figure and the camera around.

Moving objects in 3D space

Now that we've learned how to add a 3D object to our canvas, we can move and pose that object on our canvas. It requires time, practice, and patience to learn how to pose 3D characters in Clip Studio Paint, but once you know the basics of 3D space, then you'll become an expert in no time!

The screenshots *Figure 14.5* to *Figure 14.25* in the *Moving an object on the x, y, and z axes*, *Moving parts of a model*, *Moving the 3D camera*, *Using preset poses on figure models*, and *Customizing characters* sections show the **School girl B-Ver. 3** 3D character model. This model is available as a free download through the 3D character materials and the Clip Studio Assets. For more information on how to download assets with the Clip Studio Assets, see *Chapter 18*, *Exploring the Clip Studio Assets and Animation*.

The 3D object is now standing there, at its default angle. Let's learn how to move it around to fit your desired position in the next section!

Moving an object on the x, y, and z axes

To get your 3D asset into the correct position on the canvas for your scene, you may need to move or rotate it on the *x*, *y*, or *z* axis. This is true for 3D figures, objects, or any of the 3D backgrounds that can be used in Clip Studio Paint. Follow these instructions to learn how to move objects through 3D space:

1. Be sure that the **Operation | Object** tool is selected before continuing.
2. Click on the 3D object that you wish to manipulate if it is not already selected. A box will appear around the edge of the 3D object, and a Command Bar of icons will also appear both above and below the object. We will be using the top set of icons to move the object around in the space.
3. To move the entire object up, down, left, or right, hover the mouse cursor over the fourth icon at the top left of the box around the selected object. Click on the canvas and hold the left mouse button or stylus and drag it to move the object in the desired direction. The following screenshot shows the location of the icon being used to move the object up, down, left, or right. It is highlighted in dark blue:



Figure 14.5 – Screenshot of the pasted 3D material and icons

4. To rotate the object along the *x* axis (horizontal axis), and the *y* axis (vertical axis), hover the mouse cursor over the fifth icon from the left at the top of the box around the selected object.
5. Click and hold the left mouse button or stylus and drag. The object will rotate straight along the *x* or *y* axis, or diagonally to both axes, as shown in the following screenshot:

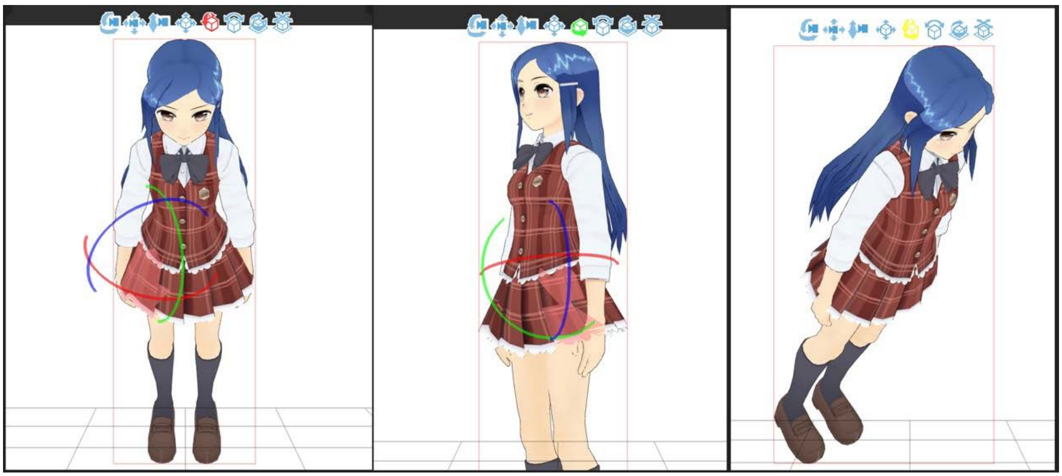


Figure 14.6 – Screenshot of the rotated 3D material

6. To tilt the object clockwise and anti-clockwise, click the sixth icon from the left, and click on the object and drag it to the right or left as shown in the following screenshot:



Figure 14.7 – Screenshot of the tilted 3D material

7. To simply turn the object around, click the second icon from the right and click on the object, then drag it to the right or left as shown in the following screenshot:



Figure 14.8 – Screenshot of the turned 3D material

8. To move the object back and forth in a 3D space, click the icon at the top left of the box around the selected object. Click and hold the left mouse button or stylus and drag. The icon is shown in the following screenshot, highlighted in dark blue, and the character has been moved back, away from the camera:



Figure 14.9 – Screenshot of the backed-away 3D material

There is also an easy way to move the object around, which is using a manipulator sphere. It's always great that there is an alternative way to move an object – because you can pick whichever you feel works best for you. Read on to learn what a manipulator sphere is and how it works!

Moving an object using a manipulator sphere

A manipulator sphere is a group of circles that have three axes, *x*, *y*, and *z*, and with camera zoom directions, you can freely switch between these axes. You can apply all the editing we have done so far in the preceding sections by using a manipulator sphere, and you might find it easier. If you click on the object, the sphere appears as in the following screenshot:

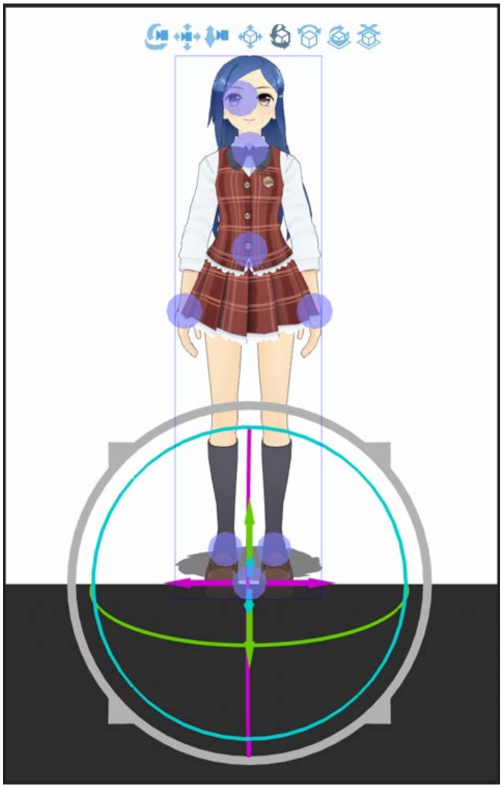


Figure 14.10 – Screenshot of the 3D editing sphere

1. Click and hold anywhere on the canvas and drag your mouse or stylus along freely in whichever direction you want the object to turn.
2. Only when you want the object closer or backed away from the camera, click and hold the outermost spikey circle, and drag along the inner (farther) or outer (closer) way. The corresponding axis to the direction of movement turns yellow, as seen in the following screenshots – from left, vertical rotate, tilt, horizontal rotate, and camera distance:

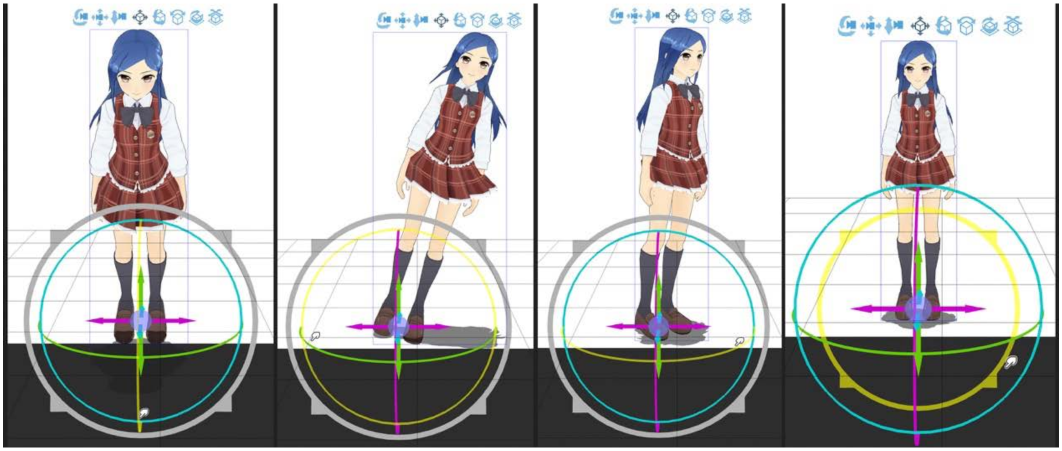


Figure 14.11 – Screenshots of four ways of 3D editing

You can have fun watching the 3D character's hair and skirt being animated to show movement while dragging it around.

But isn't the character too static and lifeless? You can learn how to change her pose by reading on to the next section.

Moving parts of a model

Some models, such as figures and characters, as well as certain object models, can have individual parts of them moved. In this section, we will continue with the **School Girl B** model and move her arm, as an example of how to pose a character:

1. With the **Object** sub tool, click on the model you'd like to pose. Once the model is selected, the movement controls will show. In the following screenshot, the blue circles are the movement handles for the major joints of the body:



Figure 14.12 – Screenshot of movement handles

2. Click on the movement control handle of the body part you want to move. While holding down the mouse button or stylus, drag the control handle to move that part of the model.
3. When a control handle is selected, a sphere made of red, green, and blue lines will also be visible. This control allows you finer access to the movement of a part of the model in the *x*, *y*, and *z* axes. Simply click and hold down the mouse button or stylus on the line of the sphere corresponding to the axis you wish to move the part of the model in and drag to complete the movement.

Using the motion control handles, a character can be posed quickly! The following screenshot was created in just a few moments by clicking and dragging the handles. The slight rotation of the right foot was achieved using the axis control lines:



Figure 14.13 – Screenshot of the edited 3D object

With the new pose, the character looks more lively! You can also edit the hand gesture. Read on to find out how.

Posing hands

Hands can be posed on a character either by clicking on each finger joint or by using the **Sub Tool Detail** menu to adjust the fingers. Let's take a quick look at the hand control in the **Sub Tool Detail** menu because it's a much faster way to pose hands than doing it by individual finger joints!

Follow these steps to change the pose of hands:

1. Click on one of the hands of the character to pose.
2. In the **Tool property** palette, click on the wrench-shaped icon in the lower-right corner to open the **Sub Tool Detail** palette.

3. Choose the **Pose** category from the menu on the left-hand side of the **Sub Tool Detail** palette. Then, the following screen will appear:

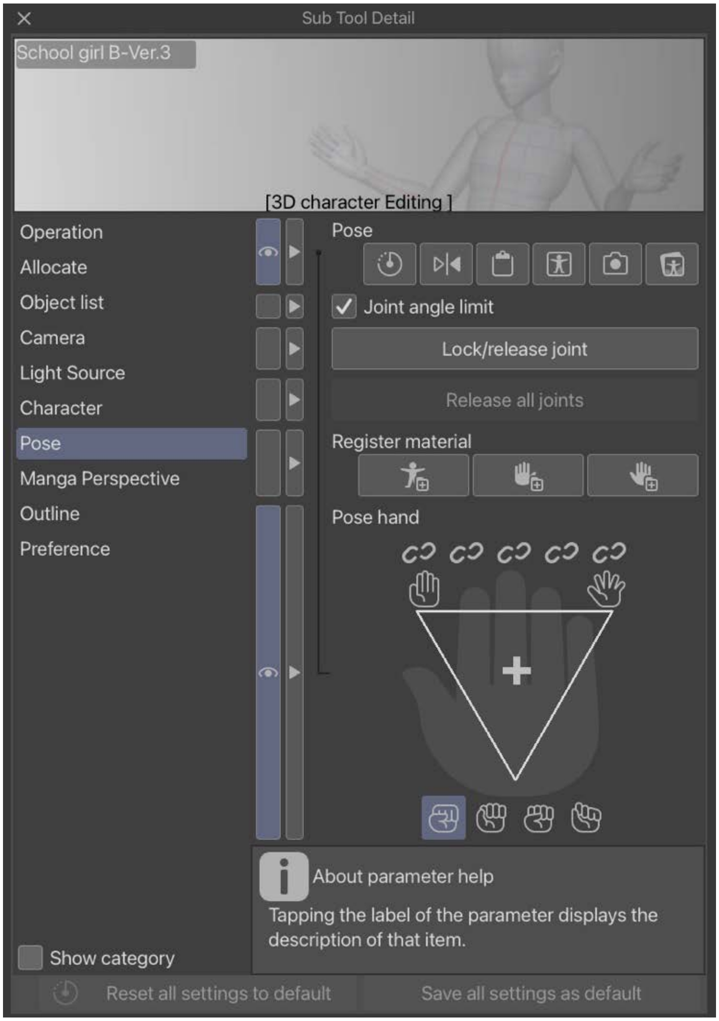


Figure 14.14 – Screenshot of the Pose settings on the Sub Tool Detail palette

4. By moving the crosshair icon inside of the triangle shape overlayed on the hand icon, the fingers of the model can be made to spread far apart or come in close together, and also to open or close into a fist.

5. Above the large icon of the hand in the screenshot in *Figure 14.14*, there are five icons that look like links in a chain. Clicking on one of these will lock the corresponding finger into the current position while allowing the other fingers to continue to be posed.

The best way to really understand these hand controls is to play around with them yourself and get a feel for them! So, give them a try and see whether you like them. Posing the hand through the **Sub Tool Detail** menu is much faster, but can be much less precise than posing each finger individually.

Not only can you move the 3D objects in Clip Studio Paint, but you can also move the 3D camera as well. Let's explore how to do this in the next section.

Moving the 3D camera

The 3D camera is another way of saying from what angle we are looking at the 3D object or scene. Instead of moving the 3D character or object, we can move the position from where we are looking at the model.

When moving the camera around the object, the object model will remain stationary. Follow these instructions to move the 3D camera:

1. To move the camera up, down, left or right, click the second icon from the left at the top of the box around the selected object. Click and hold the left mouse button or stylus and drag. The selected icon is shown in dark blue in the following screenshot:



Figure 14.15 – Screenshot of the 3D camera icon

2. To rotate the camera around the object, click the first icon from the left at the top of the box around the selected object. Click and hold the left mouse button or stylus and drag. The icon and the camera rotation are shown in the following screenshot:



Figure 14.16 – Screenshot of the 3D camera icon 2

3. To move the camera back and forth in the 3D space, click the third icon from the left at the top of the box around the selected object. Click and hold the left mouse button or stylus and drag. The following screenshot shows the selected icon has been circled. Note if you get the camera very close to the 3D character, the character will be displayed so big that it will eventually leave the canvas:



Figure 14.17 – Screenshot of the 3D camera icon 3

> **Tip**
>
> Rotate the camera when posing your character to check the position of the limbs for accuracy. See the *Moving parts of a model* section of this chapter for instructions on posing characters.

You can edit poses and camera angles using icons, the manipulator sphere, and the **Sub Tool Detail** palette. But isn't it handy to use the preset poses, skipping all of the hassle? Let's see how to find and use them!

Using preset poses on figure models

Yes, there are many preset poses available for use in your creation. We will look into how to find and apply them to a 3D figure or character.

The 3D section of the Material palette includes many sub-categories. One of these categories is an entire library of pre-made poses that you can drag and drop onto a character model or one of the generic male or female figure models. Using these poses is a great way to get your character or figure reference into a pose quickly. You may need to make a tweak or two to get the pose absolutely perfect. But many of these poses work well on their own or are a fantastic starting point for creating your own poses. As a bonus, they're easy to use, too!

Follow these steps to find out how:

1. In the **3D** category of the **Material** palette, find the **Pose** category and expand it by clicking on the triangle to the left of the category. Then, click on the **Entire Body** sub-category.
2. Select a pose to add to the character. In this example, we are using a pose called **P_soccer 01**.
3. Click on the desired pose to select it. It will be highlighted in blue when selected.
4. Click on the pose again and hold down the mouse button or stylus. Drag it over the top of the character or figure model while still holding down the button. The cursor will display a + symbol next to it when you're in the right spot.

5. Release the mouse button or stylus over the character. If you only have one 3D character on your canvas, just click on the clipboard-shaped **Paste selected material on canvas** icon at the bottom of the Material palette. The pose will change automatically to the selected preset pose, as shown in the following screenshot:



Figure 14.18 – Screenshot of the figure with a preset pose

> **Tip**
> Preset poses can also be added to the canvas without a character or drawing figure model already being there. They will show up as generic drawing figures when loaded by themselves instead of when applied to a figure.

Isn't it both easy and handy using a preset pose? You can also edit them after applying them to your canvas. Read on to learn how.

Customizing character and figure models

Clip Studio Paint allows for the customization of both the character models and the generic figure models that come with its 3D library. The character models can have their expressions, hairstyles, clothes, and accessories changed, while the generic figures can have their proportions altered. In this section, we will customize the **Schoolgirl B-Ver. 3** model into a cute catgirl, and we will alter the proportions of a generic figure in this section.

Customizing characters

There are exciting functions in Clip Studio Paint. One of them is the customization of characters. It allows us to customize ready-made characters, so you can create variations of new characters from a basic one. We can change expressions, hairstyles, clothing, and accessories! Follow these steps to learn how to customize the downloadable character models:

1. Click on the 3D model with the **Object** sub tool to select it.
2. Below the character, there will be a long horizontal menu of icons. The right-hand side of this menu will look like the following screenshot. These are the character customization controls:



Figure 14.19 – Screenshot of the customization control icons

3. Click on the **Select face of character** icon, which is on the far left of the preceding screenshot, to bring up any facial options for the character. The **Schoolgirl B-Ver. 3** model has only a **Basic** face option, as shown in the following screenshot:

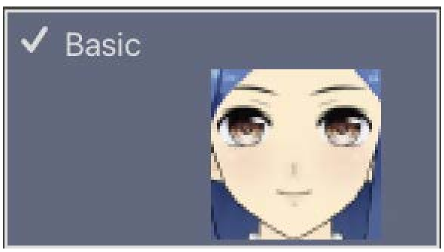


Figure 14.20 – Screenshot of the Basic face option

4. Click on the **Select facial expression of character** icon, which looks like a smiley face, to get a view of the variety of facial expressions for the character. Select the one you wish to.

   As shown in the following screenshot, each facial expression is named and has a preview image:

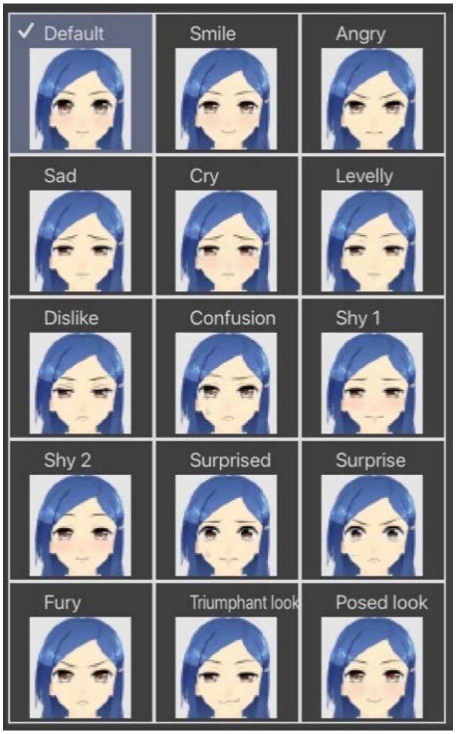


Figure 14.21 – Screenshot of the facial expression options

5. Click on the **Select hair style of character** icon, which looks like manga spikey hair, to see the different hairstyle options available for the character model. Most characters have a selection of long and short styles. Click on the desired hairstyle to select it. As shown in the following screenshot, each hairstyle has a name and a preview image to make selection easy:

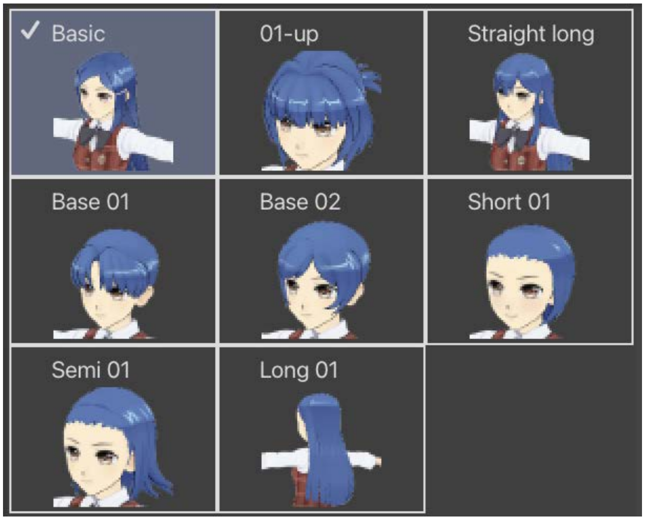


Figure 14.22 – Screenshot of hairstyle options

6. Click on the **Select body of character** icon, which looks like a human body from the neck to the thighs, to show the clothing options for the selected character. In the following screenshot, you will see that this character has three school uniform options and one street clothes option:



Figure 14.23 – Screenshot of clothing options

7. Click on the **Set display status of accessories of character** icon, which looks like a bag, to see the additional hair options (for example, more bangs, ponytails, hair bows, and so on), as well as some other fun options such as cat and rabbit ears. Multiples of the accessories can be displayed at once, so clicking on both **Bangs 01** and **Bangs 02** will overlap the bangs, one on top of the other, rather than displaying one at a time. The following screenshot shows some of the extra hair options:



Figure 14.24 – Screenshot of the extra hair options

The character customization options allow us to edit a generic school girl with long, straight hair and create a character with a little more personality. Perhaps the character in the following screenshot is a catgirl from outer space?



Figure 14.25 – Screenshot of a customized 3D character

With a little work, some customization, and importing some other models, it's easy to see that even someone who doesn't even want to draw 2D characters could make a 3D rendered comic with Clip Studio Paint. But for those who are more interested in using the generic dolls as a reference for drawing your own characters, read on!

Customizing figure models

The generic male and female drawing models don't have accessories and clothes to change. However, their body types can be altered to more accurately reflect the character you're drawing.

In this section, we will discover how to adjust the proportions of the drawing figure. Follow these steps to learn how:

1. Follow the instructions in the preceding *Introducing the 3D Material palette* section to load the male drawing figure model onto the canvas.
2. In the Command Bar, below the selected 3D figure, click on the icon all the way to the right, labeled **Adjust body shape and size of 3D drawing figure in detail**. This will open the **Sub Tool Detail** palette for the 3D model, as shown in the following screenshot:

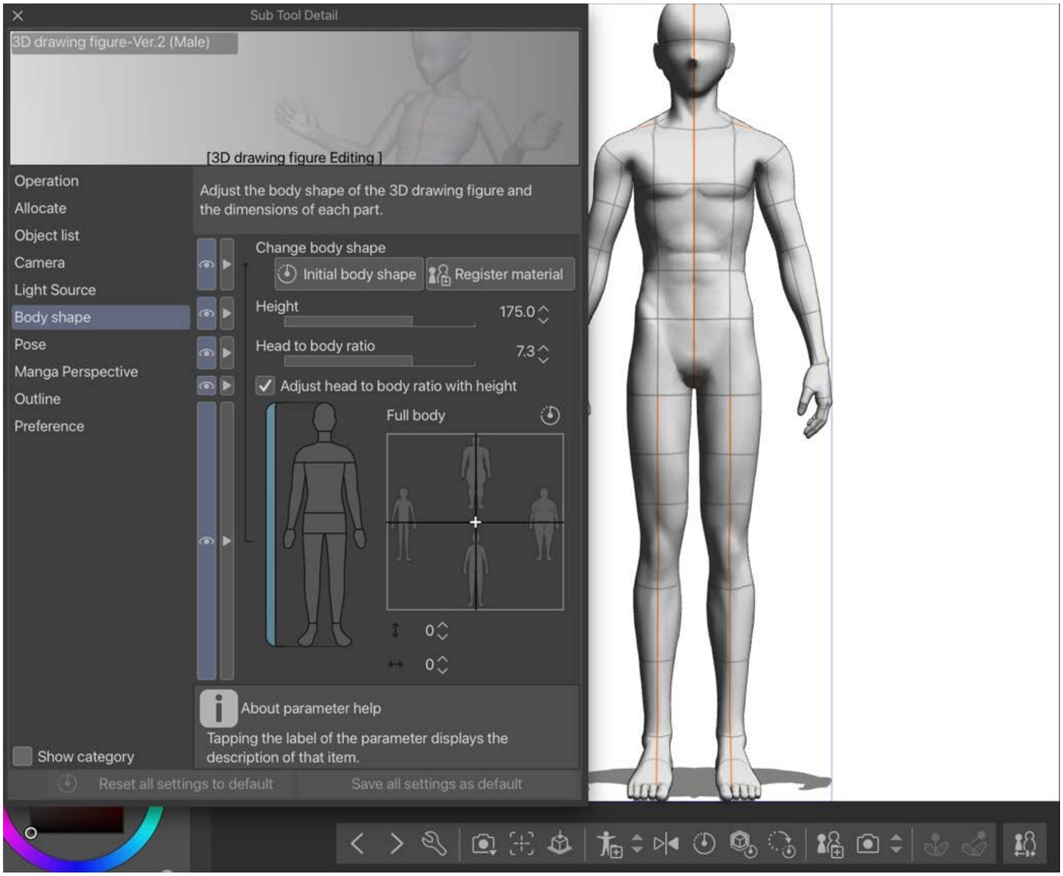


Figure 14.26 – Screenshot of the adjust body shape Sub Tool Detail palette

3. In the following screenshot of the **Sub Tool Detail** palette, to the right of the image of the full body is a square menu that is divided into four smaller squares. By dragging the white + icon into the center of the four squares, we can change the proportions of the model by mixing attributes such as skinny, muscular, and fat. The **Height** and **Head to body ratio** sliders below this menu can also be used to adjust the model:

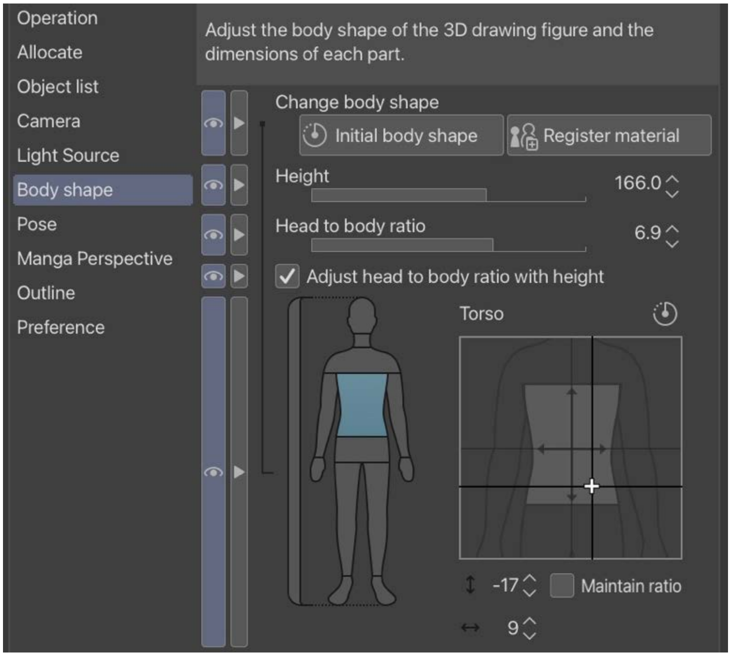


Figure 14.27 – Screenshot of adjusting the waist shape

4. To adjust the height and width of a specific part of the model, click on the corresponding section of the full-body figure in the **Sub Tool Detail** palette. In the preceding screenshot, the torso is the currently selected body part being adjusted.

5. Adjust any part of the model as needed to achieve the desired look for the drawing figure, checking how it changes on the canvas. Then, close the **Sub Tool Detail** window.

The following screenshot shows the figure model with proportions inspired by a *Chibi* anime character!

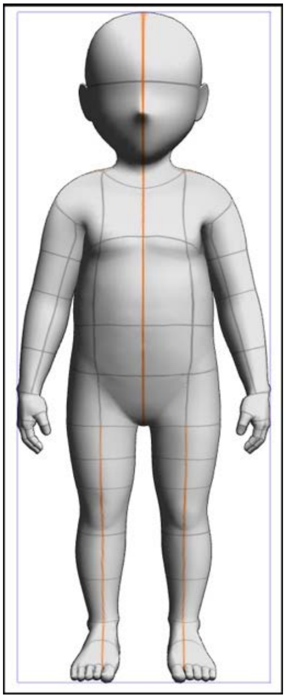


Figure 14.28 – Screenshot of adjusted body shapes

By using this option to adjust the body shape and size, you can have a variety of body shape references! In the next section, we are going to save our customized model to our Material palette so that we can use it again later.

Saving 3D information to the Material palette

You made some effort to adjust the body shape and size of the figure model, and it would be such a shame if you lost the data, especially when you'd like to use it for a character that appears in your manga several times. So it's always good to know how to save it. Let's find out how to do that in this section.

Two types of 3D information can be saved to the 3D Material palette: pose information and 3D drawing figures. Pose information can be saved both from the generic male and female figures as well as from the character models. 3D drawing figure (proportion) information can only be saved from the generic male and female drawing figures. Currently, there is no way to save changes to the character figures as custom materials.

Saving pose information

When you customize the poses of a character or an object, it's always a good idea to save them in case you want to use the same pose again in the future, so you don't need to repeat the same customization process over and over.

Follow these steps to save a character's pose information to the Material palette:

1. Click on the character or drawing figure whose pose you'd like to save.
2. In the Command Bar below the figure, locate the **Register pose to Material palette** icon, which looks like the following screenshot:



Figure 14.29 – Screenshot of the Register pose to Material palette icon

3. Click on the icon to bring up the **Material property** window. You can also bring up Material property by clicking the up and down triangles next to the human-shaped icon (see *Figure 14.29*), then click the option you want from the drop-down menu: **Register full body pose as material**, **Register Left hand pose as material**, or **Register right hand pose as material**. Then the corresponding **Material property** screen will open as you see in the following screenshot:

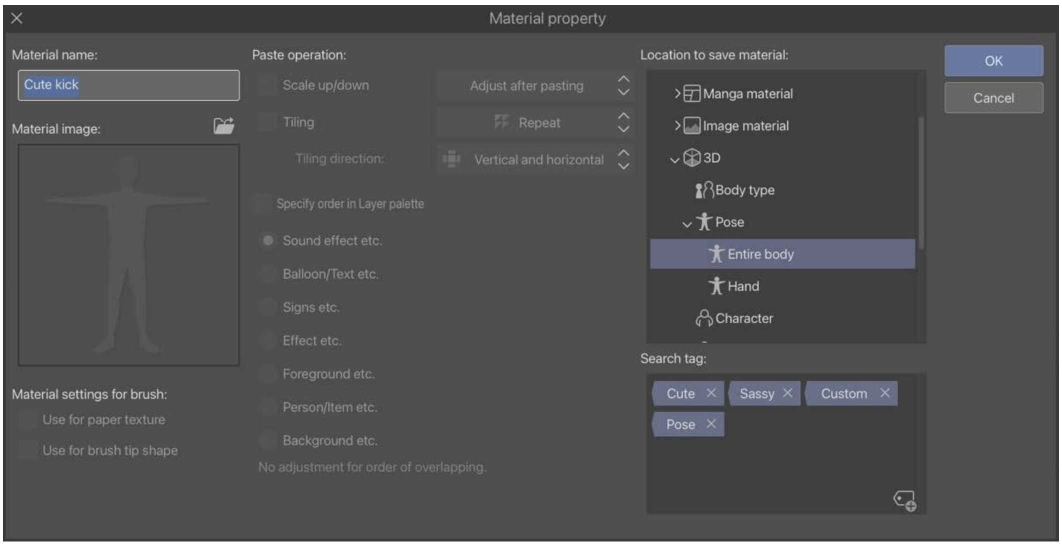


Figure 14.30 – Screenshot of the Material property window

4. Under **Material name**, enter a catchy name for your pose.
5. In the **Location to save material** section, navigate through the categories until you get to the **3D | Pose | Entire body** folder and select it as the location to save the full-body pose material.
6. Click on the icon in the lower-right corner of the **Search tag** window to bring up the text box for tag entry. Type in tag text and press *Enter*. Then, click the icon again to add another tag.
7. Once you have finished naming and tagging your pose, click on the **OK** button to finish saving the pose information.

> **Tip**
> I always recommend tagging every material that you save to the Material palette. It's an extra step, but it could save you a lot of time in the long run! In addition to tagging them with terms that describe the material itself, I always use a custom tag for anything that I save to the Material palette so that I can enter that search term and find everything I've saved.

Now you can use this pose information on any figure or character! For instructions on using preset poses, see the *Using preset poses on figure models* section of this chapter.

Let's move on to see how to save 3D drawing figure information.

Saving 3D drawing figure information

These instructions allow you to save any changes to the generic male and female drawing figure proportions that you may have made in the *Customizing figure models* section of this chapter. Follow these steps to save custom proportions to the Material palette:

1. Click on the drawing figure you'd like to save.
2. In the Command Bar below the figure, locate the **Register 3D drawing figure to Material palette** icon as shown in the following screenshot:



Figure 14.31 – Screenshot of the Register 3D drawing figure to Material palette icon

3. Click on the **Register 3D drawing figure to Material palette** icon to bring up the **Material property** screen, as shown in the following screenshot:

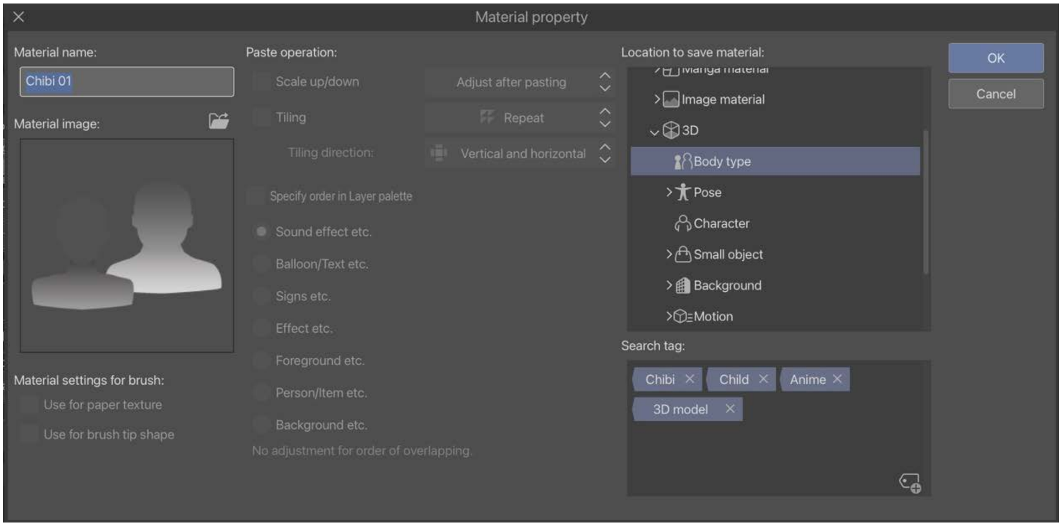


Figure 14.32 – Screenshot of the Material property screen

4. Under **Material name**, enter a unique name for your figure.
5. In the **Location to save material** section, navigate through the categories until you get to the **3D | Body type** folder and select it as the location to save the material.
6. Click on the icon in the lower-right corner of the **Search tag** section to bring up the textbox for tag entry. Type in a tag and press *Enter*. Then, click the icon again to add another tag.
7. Once you have finished naming and tagging your figure, click on the **OK** button to finish saving the information.

By collecting favorite poses or character figures, you can save a lot of precious time working on manga. Did you know that you can also import 3D models from other programs? Read on to see how to do it!

Importing 3D models into Clip Studio Paint

Using the 3D assets in the Material palette is all well and good, but what about importing a unique model from another program? In this section, we are going to look at how to do so, and how to turn it into a line drawing as a finishing touch.

Although Clip Studio Paint can import 3D information from other programs, there are some limitations. For instance, sometimes color and texture information for a model from an outside source may not import into Clip Studio Paint correctly.

> **Important note**
> The file types that can be imported into Clip Studio Paint are the Clip Studio 3D Character format (extension `cs3c`), Clip Studio 3D Object format (extension `cs3o`), Clip Studio 3D Background format (extension `cs3s`), and `fbx`, `6kt`, `6kh`, `lwo`, `lws`, and `obj` files.

Follow these steps to import 3D information into Clip Studio Paint:

1. In the **File** menu, click on **File | Import | 3D Data...**, as shown in the following screenshot:

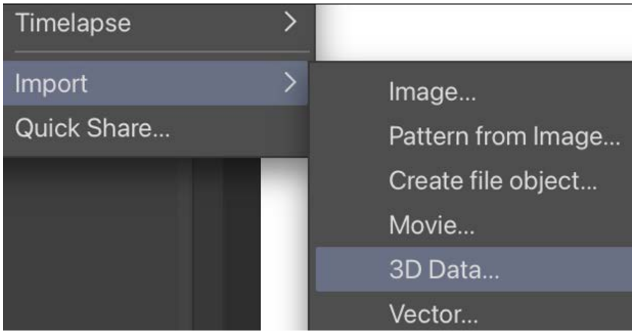


Figure 14.33 – Screenshot of the Import drop-down menu

2. In the **Open** window, navigate to the location on your computer where the 3D data file is stored. Click on the file that you wish to select, and then click **Open**.
3. It may take a moment for the 3D data to show in the file. Once it does, you will be able to position it and rotate the camera around it as normal.

Once you import a 3D model, you can turn it into a line drawing. If you have the EX version, you can do it by using an image converted to lines and tones. Find out more about conversion in *Chapter 5*, *Penciling: Layer and Layer Property Palettes.* To access the conversion menu, click on **Layer** in the **File** menu, then click on **Convert to lines and tones** to bring up the settings menu for **Convert to lines and tones**. The following screenshot shows our good friend **School Girl B** after the default settings for conversion were used on her:

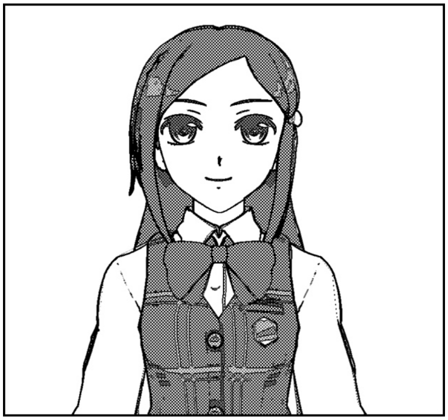


Figure 14.34 – Screenshot of an image converted to lines and tones

Don't have the EX version? You can alternatively use the **Convert Layer** option to turn a 3D character into a line drawing! To do this, click on **Layer** in the **File** menu, then click on **Convert Layer…** to bring up the **Convert Layer** window, and select **Vector layer** on the **Type** drop-down menu. Then click **Vector settings…** to open the **Vector layer conversion** window as shown in the following screenshot:

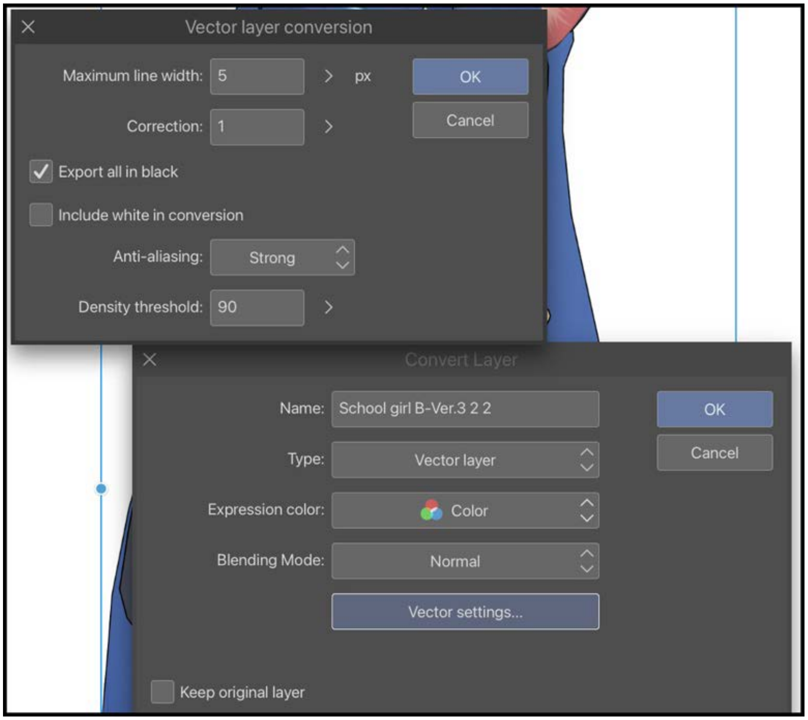


Figure 14.35 – Screenshot of the Convert Layer window and the Vector layer conversion window

I'm afraid there is no preview function for this, but you can try it out several times to get the right look by changing the settings and by clicking **OK**. The converted layer with a catgirl becomes the vector layer containing the extracted line drawing, as in the following screenshot:



Figure 14.36 – Screenshot of a 3D character converted to a vector layer

Or, you can simply click on **Layer** in the **File** menu, then click on **Convert Layer…** to bring up the **Convert Layer** window, select **Raster layer** on the **Type** drop-down menu, select **Monochrome** on **Expression color**, then click **OK**. You will have a raster layer containing a black and white drawing, as shown in the following screenshot:



Figure 14.37 – Screenshot of a 3D character converted to a raster layer

You can of course use the 3D figures and characters just as pose references for your own characters. You can find your own way of using the function!



Figure 14.38 – Screenshot of a 3D character and a drawing based on it

Wow, now you can get control of 3D objects to change poses, figures, and camera angles! And you've even mastered how to load, save, import, and finally turn 3D objects into line drawings!

Summary

This chapter took us deep into the third dimension and got us familiar with the 3D assets available in the Material palette. We learned how to add 3D assets to our canvas, as well as how to move them in the 3D space. We learned how to rotate and move our camera to give us a different perspective on 3D models. We also learned how to use saved poses from the Material palette, as well as how to customize the character models that come with it. Then, we learned how to save our own 3D information as materials that we can use later. Finally, we learned how to import models from other 3D applications and how to turn those models into line drawings using the **Convert to lines and tones** and **Convert layer** options.

These skills will help you draw characters and objects with consistency every time they appear on your manga pages. They'll also expand your range of visual expressions, camera positions, and character poses.

Now, we're going to start getting into coloring your comic! In the next chapter, we will begin by talking about the different ways to make color palettes in Clip Studio Paint, and also how to use the eyedropper and **Sub View** palette to select colors.

15
Color Palette

Just like in painting, we can make color palettes in Clip Studio Paint as well. These palettes are digital values of color that we can save, import, export, and access in different ways to make color schemes and automatically mix colors.

The following topics will be covered in this chapter:

- Understanding Color Pickers
- Exploring the Color History, Intermediate Color, and Approximate Color palettes
- Importing palettes from Adobe Photoshop
- Creating Color Palettes from the Sub View palette

We are going to see color palette variations, how to use them, and even how to create them. You'll also learn how to import them from Photoshop and pick colors from the **Sub View** palette. It's very useful knowledge to have when you start coloring your art on Clip Studio Paint and by the end of this chapter, you will be able to handle your desired color combinations with a wide range of techniques. Let's jump into the wonderful world of color!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and a new canvas opened with a white-colored paper layer. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

Understanding Color Pickers

For analog painting tools, you need a canvas, brushes, paint colors, and a palette to start. We're going to have a look at paint colors and various palettes in a digital world in this section. In Clip Studio Paint, similar to other digital drawing tools, its palettes come with colors already on them; how handy!

There are lots of ways to choose colors in Clip Studio Paint, but the three that are most used are the **Color Wheel**, **Color Slider**, and **Color Set** palettes. Each palette gives us a different way to make just about any color we can imagine using in our digital illustrations and comics. Let's take a look at each of these palettes and how to use them to pick colors in the following sections.

The Color Wheel palette

The Color Wheel palette is probably the most used method for choosing colors in the digital realm. The Color Wheel palette has two modes, **HLS** mode and **HSV** mode:

- **HLS** mode: Stands for **Hue**, **Luminosity**, **Saturation**. Hue is the degree of variation on the color, luminosity is the brightness of the color, and saturation is how much of the pure color is in the mix (colors get grayer the less saturated they are).
- **HSV** mode: Stands for **Hue**, **Saturation**, **Value**. Hue is the degree of variation on the color, saturation is how much of the pure color is in the mix (colors get grayer the less saturated they are), and value is how much white or black has been added to the color to make the new color.

The following screenshot shows the HLS mode of the Color Wheel palette:

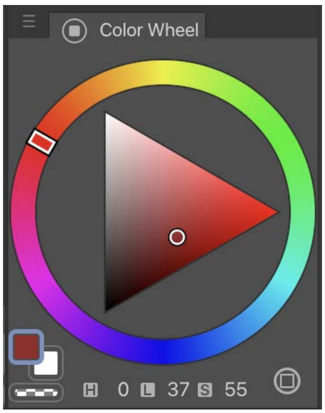


Figure 15.1 – Screenshot of HLS mode in the Color Wheel palette

The outer ring of colors controls the hue. The triangle inside of the circle shows the pure hue (chosen from the outer circle). As we move up and to the left, the color becomes lighter and closer to pure white. As we move down and to the left, the color becomes darker and closer to pure black. By clicking inside of the triangle, we can choose any saturation or luminosity of the currently chosen hue.

The bottom-left corner of the palette shows our currently selected foreground and background colors, as well as our transparent swatch. We can quickly select to use the foreground or background color from this palette, or in the primary toolbar in the user interface.

Along the bottom edge of the palette, we can see the number values of the currently selected color for hue, luminosity, and saturation, marked **H**, **L**, and **S**, respectively. In the previous screenshot, the hue value is **0**, the luminosity value is **37**, and the saturation value is **55**.

> **Tip**
> Knowing these number values can help you to match the colors that you use even if you switch to other graphics software. By clicking on the area with the number values, the options can be changed from hue, luminosity, and saturation to the **Red, Green, and Blue** (**RGB**) values instead.

The icon in the bottom right of the palette switches our Color Wheel palette to **HSV** mode, which is shown here:



Figure 15.2 – Screenshot of HSV mode in the Color Wheel palette

Like HLS mode, we can choose the hue by clicking along the outer ring in the palette. The upper-right corner of the square shows the pure hue. By moving toward the lower-right corner, the color becomes darker and closer to black. The top-left corner is pure white and choosing a color close to it makes the color lighter in value. Going toward the lower-left corner makes the color less saturated (grayer) and closer to black.

The numbers under the color picker show the **H**, **S**, and **V** values of the currently selected color.

Let's look at the different types of palettes.

The Color Slider palette

The next tab in the color palette is the **Color Slider** palette. You can bring it up on the screen by clicking **Window** on the **File** menu and then clicking **Color Slider**. It is shown in the following screenshot:

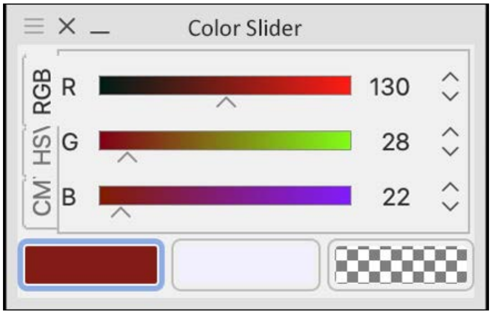


Figure 15.3 – Screenshot of the Color Slider palette

The tabs along the left edge of the **Color Slider** palette allow us to choose between different ways to select our color. The one shown in the previous screenshot is the RGB mode. Each slider in this mode controls a different amount of color. The top slider controls the amount of red in the current color, the middle slider controls the amount of green, and the bottom slider controls the amount of blue. The swatches along the bottom of the palette window are the current foreground and background colors, as well as our trusty transparent swatch.

The second tab in this palette is the HSV mode, which is the same as the HSV mode from the Color Wheel palette, but instead of a wheel and square, we have sliders to control each individual aspect of the color selection.

The final tab in the color slider palette is the CMYK selection. **CMYK** stands for **Cyan, Magenta, Yellow, Black** and these are the colors used in printing color images on paper. Although we cannot set our document to be in CMYK mode, we can choose colors based on CMYK values using these color sliders to control the amount of each color present.

The color sliders are very useful when trying to precisely match a color, say from a logo or used in a website design. If you know the number values of the color, you can precisely enter them in, using one of the tabs in the Color Slider palette.

Read on to find out about the third palette, **Color Set**. You might find it's easier to use than the previous two.

The Color Set palette

The final color palette we are going to look at is the Color Set palette. Instead of controlling color by using sliders, you can simply pick a color from a set of colors. This can be accessed on the screen by clicking **Window | Color Set** in the **File** menu. This can be seen in the following screenshot:

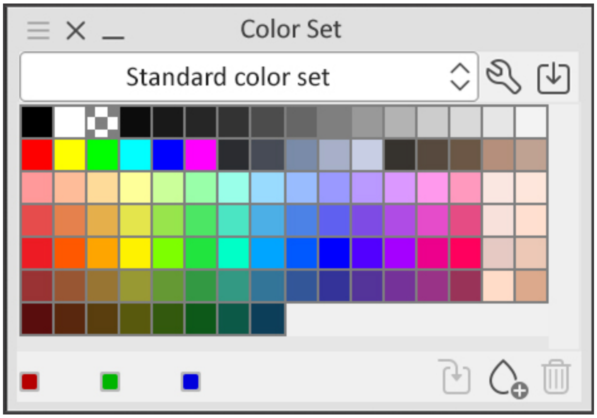


Figure 15.4 – Screenshot of the Color Set palette

If you are a Photoshop user switching to Clip Studio Paint and you've ever used **Color Swatches**, this palette will look familiar to you!

The color sets are pre-made swatches of color that you can click on to select.

The following screenshot shows a sample illustration using colors from the standard color set:



Figure 15.5 – Screenshot of an illustration using the standard color set

We can use these to select a color close to what we want and then tweak it to the exact shade we want using the Color Wheel palette or the Color Slider palette, or just use the color sets as they are.

The drop-down menu at the top of the Color Set palette allows us to choose between different sets of colors. The set shown in the preceding screenshot (*Figure 15.4*) is the standard color set. Our own custom color sets can be created as well so that we can save colors we use often, say for the main characters in a comic project.

Follow these steps to create a custom color set:

1. Click on the wrench icon to the right of the drop-down menu at the top of the Color Set palette.

   The following window will appear:

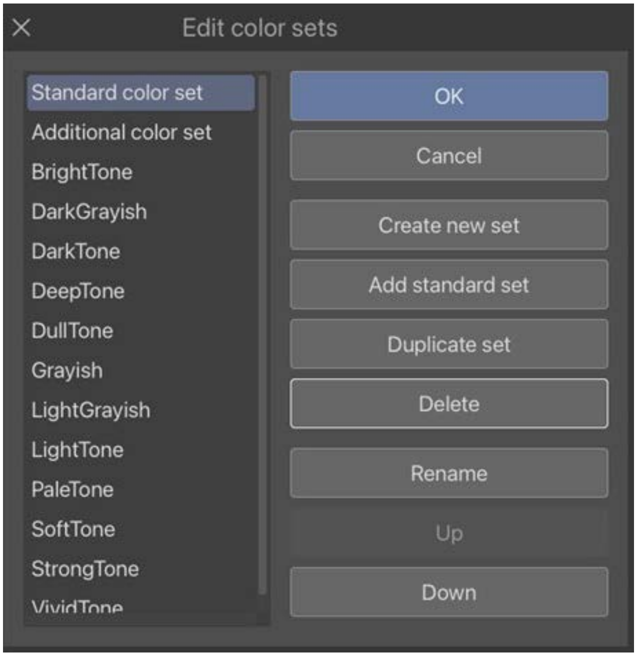


Figure 15.6 – Screenshot of the Edit color sets window

2. Click on **Create new set** in the **Edit color set** window.
3. Type a name for the new color set and then click on **OK**.

   A new color set made of transparent squares will now show in the **Color Set** palette.

4. In order to add colors to the set, first click on the transparent square where you'd like to place the new color. Then, use one of the color pickers to set the color to save as the currently active foreground color.

5. In the **Color Set** palette, click on the **Replace Color** icon in the lower-right corner of the palette, which is shown in the following screenshot, then the foreground color will replace the transparent square:

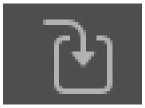


Figure 15.7 – Screenshot of the Replace Color icon

6. To add a color to a new square instead of replacing the currently selected one, click on the **Add color** icon, which looks as in the following screenshot:



Figure 15.8 – Screenshot of the Add Color icon

You have seen two different Color Wheels, the Color Slider palette, and finally the Color Set palette, and how to create your own color set. Having solid color sets will give you the security of not losing great color combinations.

Now, let's take a look at some of the other tabs in the color palette and learn how they can help us to add color to our illustrations.

Exploring the Color History, Intermediate Color, and Approximate Color Palettes

Color History, **Intermediate Color**, and **Approximate Color** are all palettes located within the Clip Studio Paint interface. Color History allows us to keep track of colors that we've already used in our art, and the Intermediate Color and Approximate Color palettes allow us to mix colors in different ways. In this section, we will explore each of these palettes and learn how to use them.

The Color History palette

Have you ever painted and required a color you were using a while ago, but it's so blended in with the colors around it that it's impossible to get the pure color anymore? The Color History palette is the answer to your prayers, and it's easy to use to boot!

Before opening the Color History palette, open a blank document and select a brush or pen tool. Choose a color and scribble on the open canvas. Do this a few more times with several other colors. Before the Color History palette can show us anything, we need to have some colors used on our page so that we have a history built up. The use of the color can be a simple click of the mouse or a stroke of the stylus, so long as it was used.

Now that we have used a few colors on the canvas, open the **Color History** palette by clicking on **Window | Color History** in the **File** menu, or by clicking on the **Color History** tab in the color palette. The **Color History** palette is shown in the following screenshot:

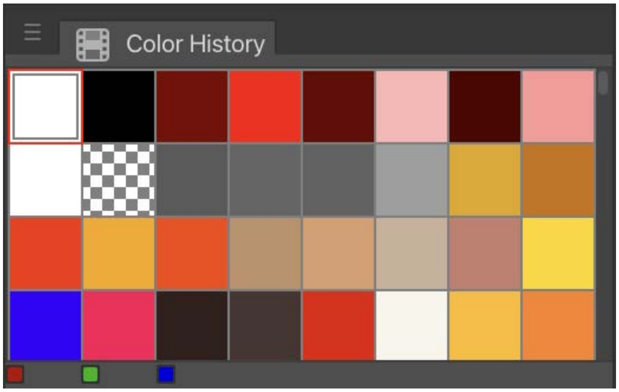


Figure 15.9 – Screenshot of the Color History palette

The palette will show any colors recently used. Click on the square of the required color to make it active again.

To save the colors from the history palette, click on the menu icon in the top-left corner of the palette, then click on **Register to color set palette** to save the color swatches. To clear the color history, click on the icon in the top-left corner and select **Clear color history**. This will reset the palette and start the color history over again.

Color History is such a simple little palette without a lot of options, but for a digital painter, it can be a powerful tool and make it much easier to keep consistent colors across an entire piece.

Next, we are going to see a good palette for picking up in-between colors.

The Intermediate Color palette

The Intermediate Color palette allows us to create a harmonious combination of colors to use in our illustration and manga. By allowing Clip Studio Paint to do the mixing, we can easily create a color scheme that works together.

The steps that we will follow to learn how to use this palette work best if you can see the Intermediate Color palette and the Color Wheel or Color Set palette at the same time. This is impossible when the palettes are nestled together, as they are in the default user interface for Clip Studio Paint. We will need to pop out one of the palettes so that we can see them at the same time.

To pop out the **Intermediate Color** palette, locate it in the tabs nested within the color palette. Click on the tab at the top of the palette where the name of the palette is showing. With the mouse button or stylus still held down, drag the **Intermediate Color** tab out of the color palette. The following screenshot shows the palette in the middle of being dragged out onto the canvas view area:

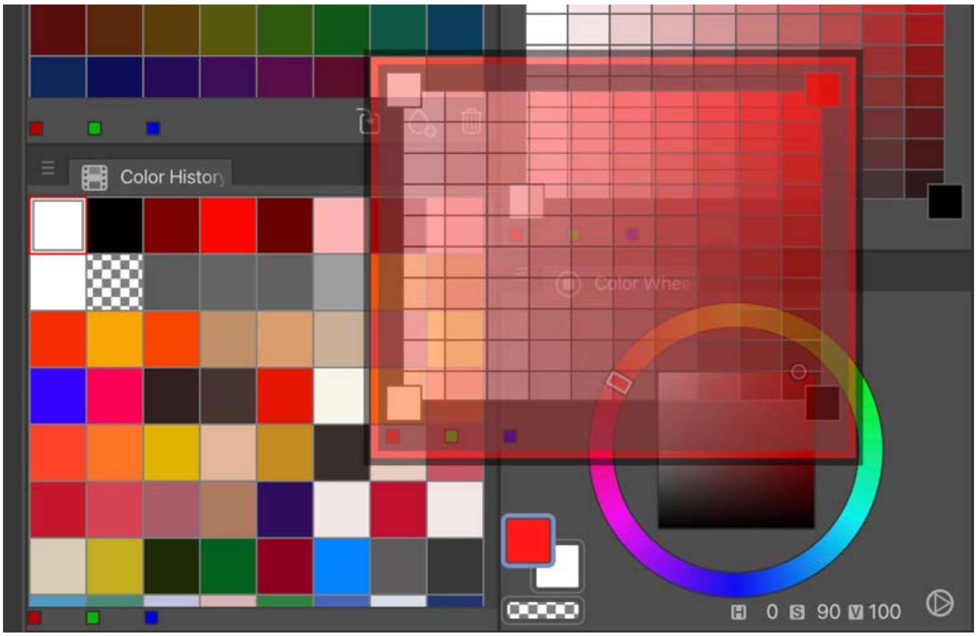


Figure 15.10 – Screenshot of moving the Intermediate Color History palette

Once you have moved the Intermediate Color palette out of the main color palette area, release the mouse button. You should now be able to see the Intermediate Color palette and the Color Wheel or Color Set palette side by side, as shown here:

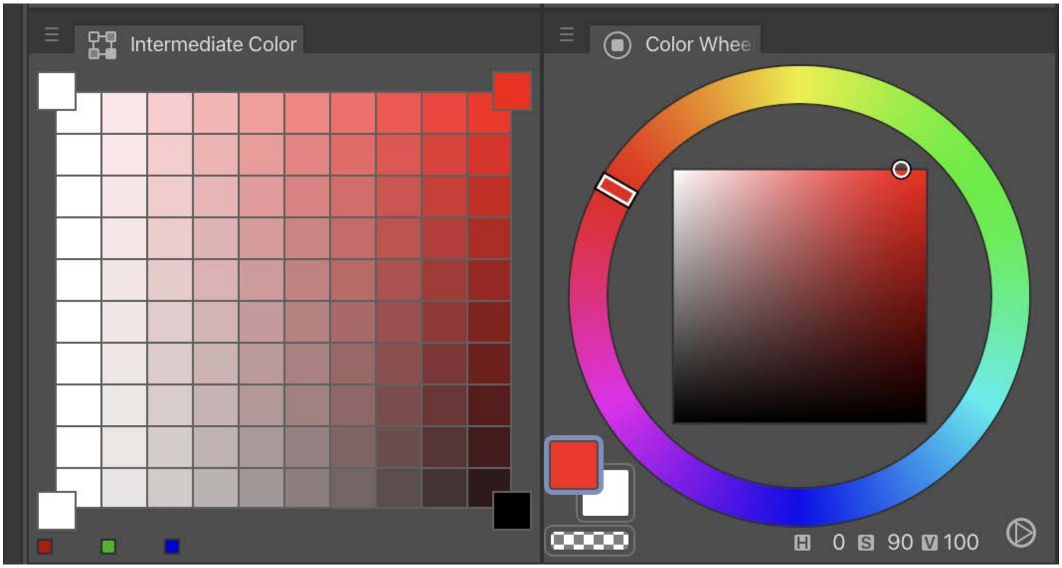


Figure 15.11 – Screenshot of two color palettes located side by side

Once you have these palettes next to each other, follow these steps to create a color scheme that works together using the Intermediate Color palette:

1. Choose a color from the **Color Wheel**, **Color Set**, or **Color Slider** palette windows. This can be any color you wish to use in your color scheme.
2. With your chosen color as the currently active color, move the cursor over the large square in the top left of the **Intermediate Color** palette. The cursor will become a paint bucket icon over the square. Click to add the color to the corner box.

3. Repeat *steps 1-2* for any other colors in your color scheme, adding new colors to the other corner boxes. In the following screenshot, we have used green in the upper-left corner, red-orange in the upper right, blue in the lower-left corner, and black in the lower-right corner:

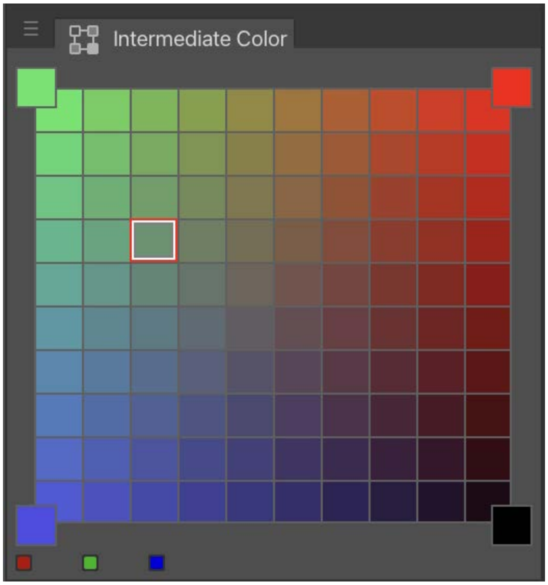


Figure 15.12 – Screenshot of the Intermediate Color palette with new colors

4. Use the cursor to select colors from the small square color swatches in the center of the **Intermediate Color** palette to color your image with.

As we add colors to the corners of the Intermediate Color palette, the small squares on the inside of the palette are automatically filled with a blend of those colors. This is an easy way to get mixes of colors the way that we would with paint in the analog world, but by using digital tools to do our color mixing for us.

Read on to see a more experimental palette, which is the Approximate Color palette, which can produce accidentally good color coordination for you!

The Approximate Color palette

The **Approximate Color** palette is a completely different way of mixing colors. This palette requires some experimentation to get used to it with different color mode sliders, but once you play with it, you may just love it! The Approximate Color palette is shown here:

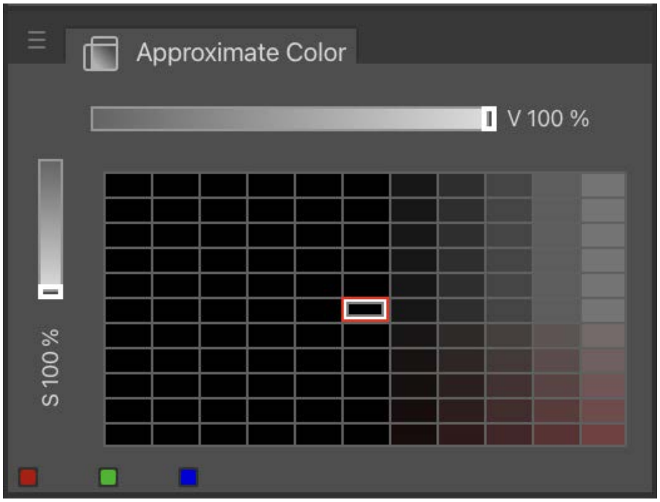


Figure 15.13 – Screenshot of the Approximate Color palette

Follow these instructions to learn how to use the Approximate Color palette:

1. Open the **Approximate Color** palette by either clicking on the tab in the color palette or by clicking on **Window** in the **File** menu and clicking on **Approximate Color**.
2. Select a color other than black as the active foreground color. The currently selected foreground color will change the results of the blending in the **Approximate Color** palette.
3. Click on the text to the right of the top slider to open the pop-up menu of blending options. These options will be discussed in detail later.
4. Click on the text below the slider on the left side of the **Approximate Color** palette window. Choose an option to blend from this pop-up menu.
5. Adjust the top and left sliders by moving them and seeing how the colors in the palette change.
6. Click on a color square inside of the palette to choose that color as the active foreground color.

The options next to the sliders in this palette are **Hue**, **Saturation**, **Luminosity**, **Luminance**, **Red**, **Green**, and **Blue**.

This list gives details on each of these options:

- **Hue**: The degree of variation of the color.
- **Saturation**: The vividness of the color. Higher values result in more vivid colors.
- **Luminosity**: The value of the color mixed in.
- **Luminance**: The intensity of vivid brightness of the color.
- **Red**: The amount of red mixed in.
- **Green**: The amount of green mixed in.
- **Blue**: The amount of blue mixed in.

The sliders on each axis control how much of the currently selected parameter is being used. For instance, setting both the horizontal and vertical axes to **Hue** and setting both slider values to **100%** produces lots of very saturated colors when a similarly saturated color is the currently active color. The following screenshot shows what the **Approximate Color** palette looks like when a saturated purple color is chosen and the horizontal and vertical axes are set to **Hue**:



Figure 15.14 – Screenshot of the Approximate Color and Color Slider palettes

We have learned about some great functions that Clip Studio Paint offers: the Color History palette to find colors you used before, the Intermediate Color palette to mix colors, and finally, the Approximate Color palette to control various slider values to find your desired colors.

For Photoshop users who recently started using Clip Studio Paint, the next section is the one for you!

Importing palettes from Adobe Photoshop

If you are switching from Adobe Photoshop to Clip Studio Paint, there is no reason why you can't take any custom color swatches you may have created with you to your new software! In this section, we will import Photoshop color swatches into the Color Set palette.

Before being able to import your Photoshop swatches, you will need to save them from Photoshop to a `.aco` file. In Photoshop, you will want to go to the **Swatches** palette and click on the menu (it will most likely be in the upper-right corner, depending on your version of Photoshop). Next, click on **Save swatches** in the menu. Save the file to a folder on your computer where you will be able to locate it easily. You can also find `.aco` files for download on the internet with colors such as Copic Marker inks and more.

Follow these steps to import a color swatch set from Adobe Photoshop to Clip Studio Paint:

1. Open the **Color Set** palette by clicking **Window** in the **File** menu, then click **Color Set**.
2. Click on the menu icon in the top-left corner, which is circled in the following screenshot:

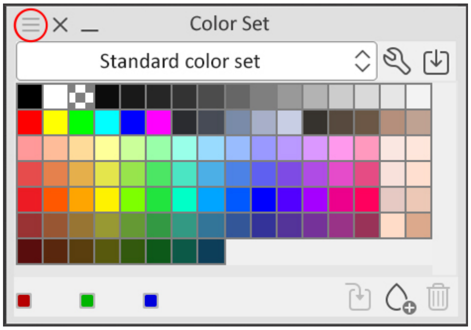


Figure 15.15 – Screenshot of the Color Set palette

3. Click on **Import color set** in the **Color Set** menu.

4. Navigate to the folder where the `.aco` file is located on your computer's hard drive. Click on the file to select it, as shown in the following screenshot, and then click on **Open**:

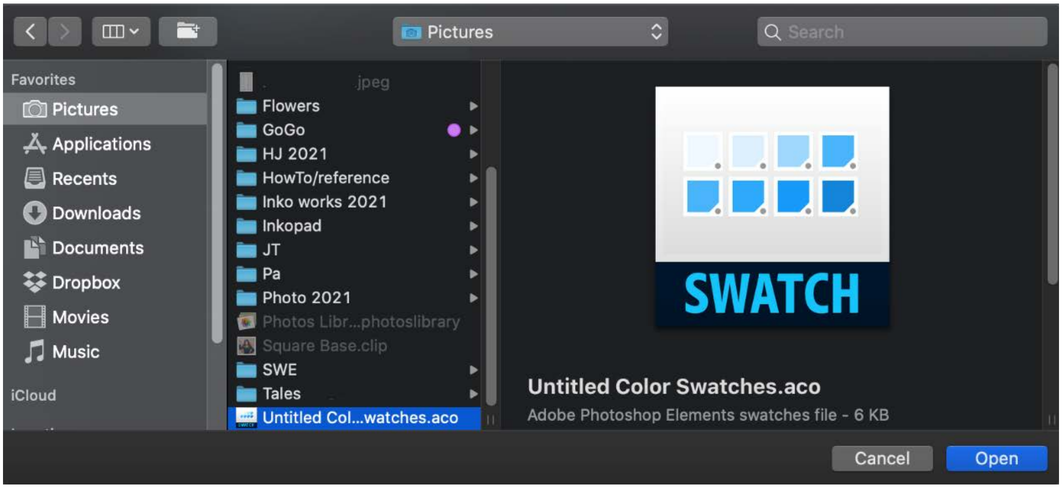


Figure 15.16 – Screenshot of the Color Swatch file in Finder

5. The swatches from the color file will be imported and named automatically, as shown in the following screenshot:



Figure 15.17 – Screenshot of the imported color swatch

6. To rename the imported color set, click on the wrench icon in the **Color Set** palette. The **Edit color sets** window will open.

7. Find the imported color set's name in the list to the left. Click on it once to select it, as shown in the following screenshot:

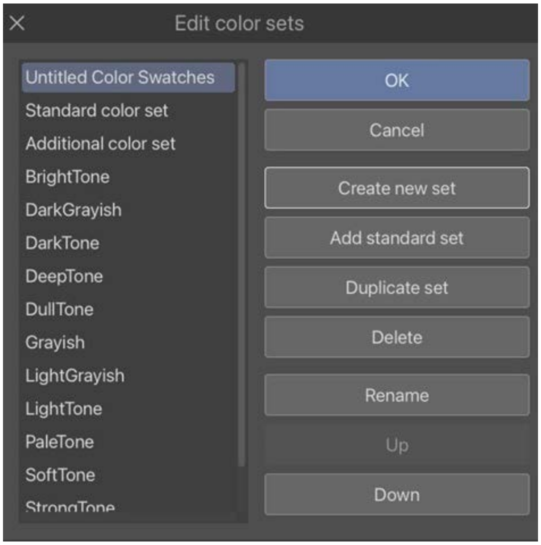


Figure 15.18 – Screenshot of the Edit color sets window

8. Click on **Rename** settings. The name on the left will change to a text entry box. Type the new name for the color set and then press *Enter*.
9. The color set's name will be changed, as shown in the following screenshot:

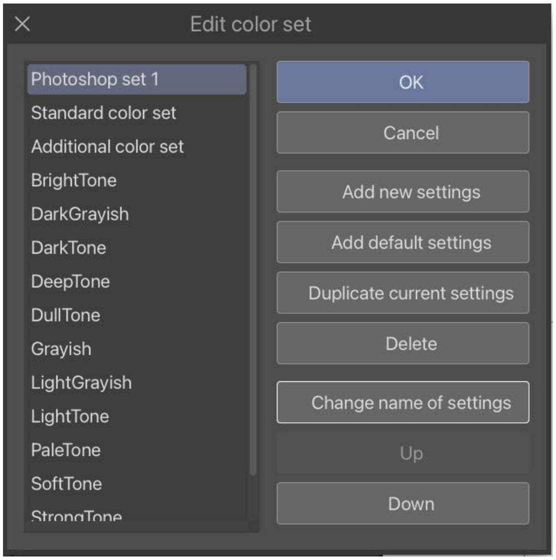


Figure 15.19 – Screenshot of the Edit color set window with a new name set

10. Click on **OK** to save the changes.

Now that we know how to use the different features of the color palettes, we will learn how to select colors using the **Sub View** palette. Read on to learn how to do this.

Creating Color Palettes from the Sub View Palette

In addition to all the other wonderful ways we've explored of selecting colors in this chapter, we can select colors from references that we've loaded into the Sub View palette as well. This is easy, convenient, and a real time saver for those working on comics where the same colors are used for characters or environments over and over.

Follow these steps to import an image into the Sub View palette and then select colors from it:

1. Locate the **Sub View** palette. It is usually nested with the Navigator. If it cannot be located in the interface, go to the **File** menu and click on **Window | Sub View** to bring it up.
2. In the bottom-right corner of the palette, click on the **Import** icon, which is circled in the following screenshot:

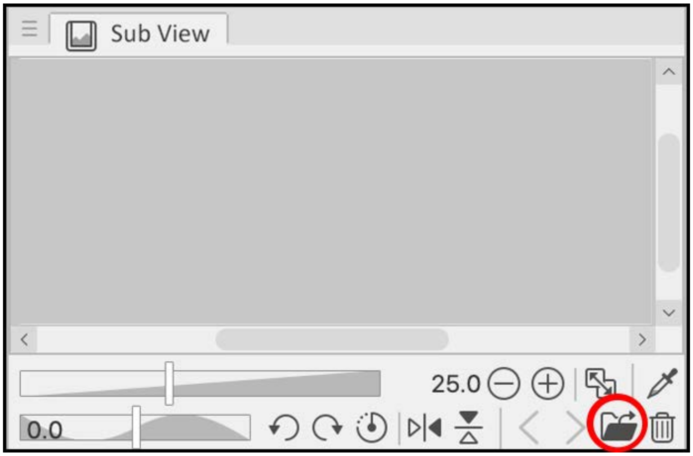


Figure 15.20 – Screenshot of the Sub View palette

3. Locate your reference image and click on it to select it, then click on the **Open** button to complete the import.
4. Your image will now be visible in the **Sub View** palette.
5. To select colors from the reference image, click on the eyedropper icon circled in the following screenshot, above the trash can icon:



Figure 15.21 – Screenshot of the Sub View palette with an image

6. Move the cursor over the image in the Sub View palette and click with the eyedropper to select a color from the reference image. The color will become the currently active color.

The Sub View palette is a great place to keep regularly used references, such as character concept art, environment designs, and anatomy and pose references. Being able to select colors from it means that colored character references become easy-to-use palettes in their own way. We can select the colors directly from the character concept art and then use them to add color to our comics.

Summary

In this chapter, we began to explore the wonderful world of color. Color is a complex subject, and many studies can be done on using it effectively, but by using the tools and palettes in Clip Studio Paint, we can make it a little bit easier to handle. We learned how to use the Color Wheel, Color Slider, and Color Set palettes. Then, we learned how to use the Color History, Intermediate Color, and Approximate Color palettes to track and mix our colors. Finally, we imported color swatches from Photoshop and learned how to select colors from the Sub View palette. For certain, these functions will help you color your art in future creations, to keep your favorite colors or build beautiful color combinations.

So, how do we apply these colors to our digital art? In the next chapter, we will learn how to create color flats, use layer blending modes, and color our ink layers. It's going to be a packed chapter, so let's get going right away!

16
Using Clip Studio Paint to Color Your Manga

In this chapter, we will take the color selecting skills that we learned in the previous chapter and use them to start coloring our comics. Here are the topics that we will cover in this chapter:

- Using Reference Layers
- Creating Flats using the Bucket Fill and Pen tools
- Exploring Layer Blending Modes
- Creating Colored Line Art

We are going to look at how to use reference layers and start exploring ways to add colors without having mishaps such as overflooding areas you want to color. Then we will learn what layer blending modes are and the benefit of using them, with rich visual references. Finally, we will learn how to change the colors in line art. By the end of this chapter, you will be able to handle digital coloring easily and effectively, which means you can expand your range of color expressions.

Let's jump into the wonderful world of color!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and a new canvas opened with any line art layer and a white-colored paper layer. Any size is fine, but I recommend creating a 300 dpi square canvas to go through the content in this chapter.

Using Reference Layers

In this section, we are going to look at a basic way, and one of the most useful, to start coloring. Having line art already on your canvas and knowing the great digital coloring benefits really changes your creative life.

Let's have a look at reference layers. **Reference layers** are a game-changer for anyone who does digital art. Reference layers allow us to make some aspects of the digital coloring process a lot easier. Many digital art beginners make a mistake when they start adding color to their art. Once they have some nice inks down, they grab the bucket fill tool in whatever software they're using and start adding color willy-nilly to the same layer that their line art is on. This produces results like the following screenshot:



Figure 16.1 – Screenshot of an image colored by the bucket fill tool

If we look closely at the area between the black lines and the color, we can see a slight line of white and gray pixels that haven't been filled in. This results in an unpolished look, and to take a pen tool and go over the unfilled area takes a lot of time to clean it up.

Each artist is unique and has their own way of working, but it is recommended that you utilize your layers to their full advantage and also to make your process easier. Line art should be on one layer, and coloring should be another. This is very easy to do if you create your inked lines digitally because on the layer, you should have just ink lines and the rest of the space is transparent. If you have ink lines from a scanned image, the whole layer is opaque, which means you can't separate layers of ink lines and background color. All you then need to do is create a new layer below the inks layer and then put your colors on that layer, as shown in the layer setup in the following screenshot:

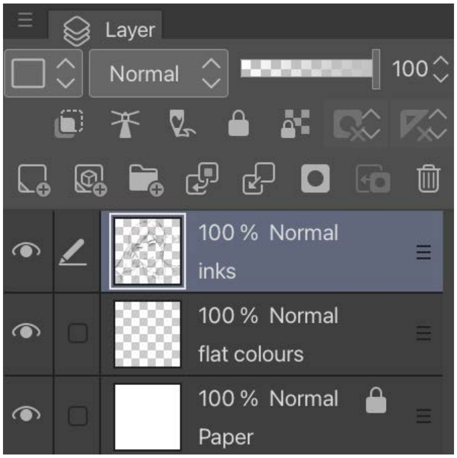


Figure 16.2 – Screenshot of the Layer palette

Another thing that some digital art beginners do is to create their color layer below their lines, then take the pen tool and draw around the outline of each area on the new layer so it can be filled in on the color layer. This also takes a lot of time and effort and can be done much more easily and more effectively using the tools and features built into Clip Studio Paint.

> **Tip**
>
> If you draw ink lines on paper and scan them into your computer, you can still digitally color your lines. You will want to set your layer with your scanned lines with the **Multiply** layer mode. This will make your white areas transparent when color is applied to layers underneath, while the black areas will not show color through them.

Before we get into filling in actual colors, let's talk for a moment about reference layers.

Reference layers are layers that have an effect on how tools act on other layers. This setting is turned on and off by clicking on the lighthouse icon at the top of the **Layer** palette. In the following screenshot, this icon is highlighted with a red circle:

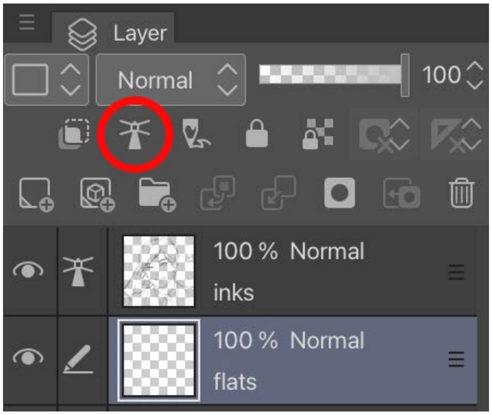


Figure 16.3 – Screenshot of the reference layer icon on the Layer palette

The preceding screenshot shows that the **inks** layer has been turned into a reference layer. Now, even if we go to the **flats** layer below it, any tools that we set to work with the reference layer will be changed by the contents of the reference layer.

As an example, let's see what happens when we use a pen tool with the reference layer options. In order to do this, we'll open the **Sub Tool Detail** window with **G-pen** selected. We learned how to do this in *Chapter 9*, *Inking Special Effects*. Then, follow these steps to use the anti-overflow options with the pen tool:

1. Click on the **Anti-overflow** option in the menu of the **Sub Tool Detail** palette.
2. Check the box next to **Do not cross lines of reference layer**.
3. Use the pen on a layer other than the layer set as the reference layer. The pen will only fill inside of the lines where it is clicked. Using the thicker pen it would be easier to see the effect.
4. If there is still a white outline around the color area, click on the box next to the **Area scaling** option. This option will automatically expand the area colored so that the color goes underneath the line art slightly, eliminating the white pixels.

In the following screenshot, we can see the option settings for **Anti-overflow** on the left, and the **Layer** palette on the right, and we can see that we are coloring on the **flats** layer. Even though the line art is on a completely different layer, we can bind the colors to the line art boundaries using this simple combination of settings:

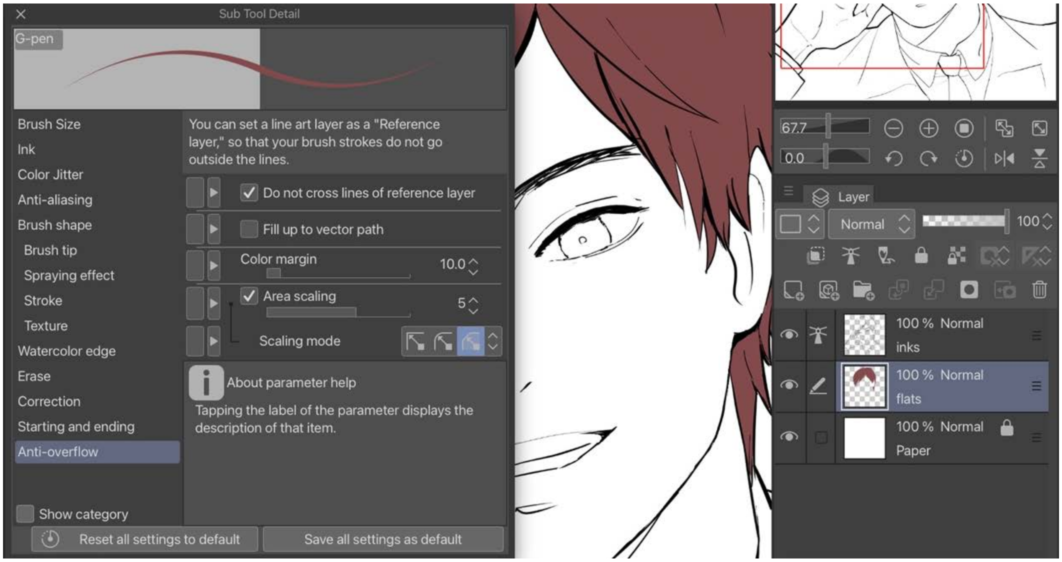


Figure 16.4 – Screenshot of the Sub Tool Detail and Layer palettes

Now you know the good way to start coloring with the Reference Layer and **Anti-overflow** setting on pen tools. Let's explore two ways of making color flats in the next two sections. Read on to learn more.

Creating Flats Using the Bucket Fill and Pen Tools

In this section, we will use the bucket fill tool, which uses the reference layer as its boundaries.

To complete this section, we will need a file open that has a set of lines on a layer we have set as a reference layer. Only one layer can be set as the reference layer at a time, but we can use tools that conform to the reference layer on any other layer in the file. Also, note that sometimes in the Clip Studio Paint interface, the reference layer is called the referring layer.

Complete the following steps to create a custom bucket fill tool that conforms to the reference layer:

1. Select the **Fill** (paint bucket) tool.
2. Select the **Refer other layers** sub tool.
3. In the **Tool property** palette, find the **Refer multiple** option. Select the **Reference layer** icon for this option.

4. Ensure that the **Area scaling** box is checked.

   This will automatically expand the boundaries of the color underneath the line art, ensuring a smooth transition from line art to color without any stray white pixels. You may have to adjust this setting for optimal results, depending on how thick or thin your line art is. Use the eraser tool to clean up any overflow that goes into areas where it's not desired.

5. If there are small gaps in your ink lines, check the box next to the **Close gap** option. This will automatically close small gaps and prevent colors from flowing over into other areas. Depending on how large or small the gaps are in your reference layer's lines, you may have to adjust the slider for optimal results. The settings will look like the following screenshot:

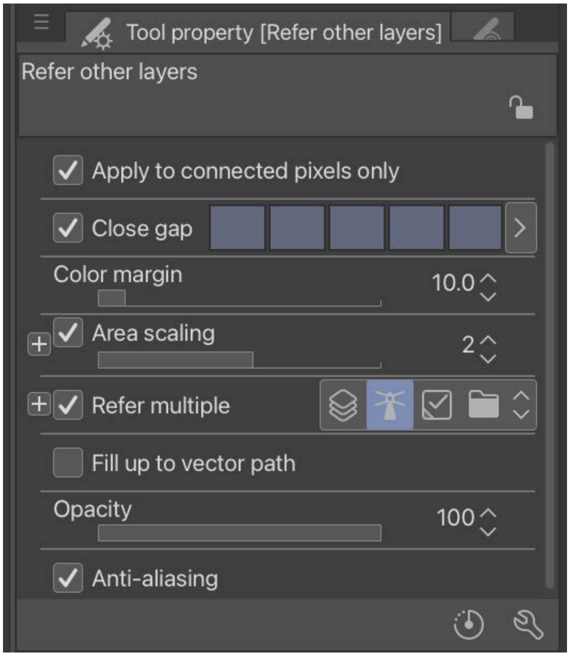


Figure 16.5 – Screenshot of the settings for an image colored with the Fill tool

6. Using the **Fill** tool, click on the areas of the drawing to apply the required colors for that drawing. In the following screenshot, the colors for the hair, skin, eyes, and clothes have been added to the character, but there are still some small white spots that the fill bucket missed because the areas are too small:



Figure 16.6 – Screenshot of an image colored with the Fill tool

7. Use the pen or brush tool to fill in any other stray areas or add details, such as the whites of the eyes or any other areas that need special attention.

> **Tip**
>
> Many digital art beginners ask how many layers they should use when creating their pieces. As with almost anything in art, this is really up to the artist. While you can put everything on one layer, it is recommended to separate line art and color layers so that colors can be changed without having to change the line art, and coloring and special effects are made easier. Some artists put all their flat colors on one layer, then have one layer for shadows and another for highlights. Some artists have a separate layer for each and every color used in their piece. It depends on how you want to work as an artist, and sometimes it is up to the specs of your computer! A computer with less RAM and hard drive space won't be able to handle a file with lots of layers, so keep this in mind.

Now that the flats are done using the Bucket Fill and Pen tools, we can use the Auto select (magic wand) tool to select the flat colors from the **flats** layer and then add shadows and highlights on another layer using the brush of your choice. Layer blending modes can also be used for adding shadows and highlights, which we will explore in the next section.

Exploring Layer Blending Modes

Layer blending modes are functions for colored layers to change how to blend the colors with other layers. You can make colors darker by mixing them with other layers, or lighter, or invert the hue. When you want to add shade, light, light reflections, and color enhancements to your flat color art, layer blending modes will come in handy, because you can add these effects without hiding or ruining the flat color art! We are going to have a look at what layer blending modes are and how you can use them with examples.

At the top of the **Layer** palette is a drop-down menu that controls our layer blending mode. The following screenshot shows the **Layer** palette and some of the blending modes available for us to use in our art:

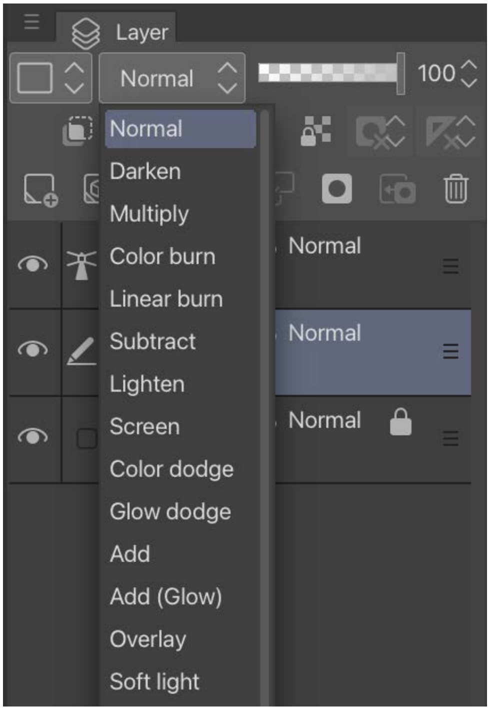


Figure 16.7 – Screenshot of the layer blending mode drop-down menu

There are tons of layer blending modes, and each one can give us a different effect. However, in this section, we are going to concentrate on the **Multiply**, **Screen**, **Soft light**, and **Lighten** layer modes. These are the four modes most used in coloring, though of course, you may find that other modes fit your style better. Let's look at each of the four modes that we listed and see how we can use them to color our images.

The Multiply mode

The **Multiply** mode is used most often by digital artists. This is because it makes white areas of the layer "transparent" but keeps the black areas opaque. This makes it the ideal selection for something like a scanned ink image. By setting the scanned image to **Multiply**, digital colors can be applied beneath the line art to finish the illustration. **Multiply** also makes colors darker by combining them with the colors below them. This makes the **Multiply** mode ideal for shadow layers.

Purple is a very popular color to shade with. In the following screenshot, *Figure 16.8*, the purple layer is set to the **Normal** blending mode and no mixing is going on with the flat colors beneath:



Figure 16.8 – Screenshot of an image with shadows in the color purple

Now, we are going to make the purple color interact with the flat colors below on the **Layer** palette and mix them, making new colors and shades by changing the layer blending modes to **Multiply**.

We can control the contrast between the base color and shadows by adjusting the **Opacity** of the shadow layer. This is done using the slider to the right of the blending mode. The following screenshot has had the shading layer lowered to **50**%, making the shadows much less intense:



Figure 16.9 – Screenshot of an image with 50% shade opacity

Building up multiple layers of shadows can provide greater contrast and deeper shadows. Let's look at adding colors or light effects in a subtle way with the **Soft light** layer blending mode.

The Soft light mode

The **Soft light** mode is the best mode when you want to add colors very softly, such as creating rosy cheeks, or the graduation of hair color. First of all, you can select the area you want to add the color to with the **Auto select** magic wand tool and click on the colored area you want to select.

Then you can only add colors inside the selection boundary without the new color overlapping the old colors. The following screenshot shows adding the color pink using the **Soft** airbrush tool with the **Soft light** blending mode only on the selected skin color area:



Figure 16.10 – Screenshot of an image with the cheeks colored with Soft light mode

The effect is so gentle, you can have great control of how dense the color you want to add. Read on to find out how to add a lighting effect with the **Screen** layer blending mode.

The Screen Mode

The **Screen** mode is useful for creating vivid highlights. You can even use colors that you might not think of using for highlights to create a certain mood in your illustration or comic scene. In the following screenshot, the highlight layer is set to **Normal** to show that we are using a turquoise color on this layer:



Figure 16.11 – Screenshot of an image with highlights

By using our drop-down menu on the **Layer** palette, we can set our highlight layer to **Screen** mode. Using this blending mode, we now get the highlights shown in the following screenshot:



Figure 16.12 – Screenshot of an image with highlights in the Screen blending mode

Now, instead of the highlights on the face being turquoise, they are a light color close to white. The highlights on the hair have gotten whiter as well, while the highlights on the clothes still retain the turquoise hue. This mode gives us an effect that's just the opposite of what the **Multiply** mode does.

Let's have a look at just one more layer blending mode to give a light effect, the **Lighten** mode.

The Lighten Mode

This mode looks at the layers in the top layer and the bottom layer and combines the color in the bottom layer with the brighter color. We have taken the same highlight layer used as the example in the previous section about the **Screen** mode and changed it to the **Lighten** blending mode in the following screenshot:



Figure 16.13 – Screenshot of an image with highlights in the Lighten blending mode

Now, our highlights have remained closer to the turquoise color of the original layer. They are less white, but moodier in this layer mode!

We have learned how to add shade with the **Multiply** mode, rosy cheeks with the **Soft light** mode, a light effect with the **Screen** mode, and finally, a moodier light effect with the **Lighten** mode. These are just four of the many blending modes available to us. By combining layer modes and opacity in different ways, we can create many different effects. Experimentation is the key here because each artist is different and likes to create a specific look with their art. Changing the layer mode does no damage to the original layer, so play with the layer modes in your art to see what different looks you can create using them and different colors to create shadows and highlights in your art.

There is also a way that you can add colors to your black line art, which comes in very handy when you want to create art with line drawings appearing to naturally blend in harmony with colored areas. Read on to find out how to do it.

Creating colored line art

It's OK when you draw black and white art with a solid black line, but once you start coloring the image, don't you think the black line color can be too harsh on the eyes? We are going to explore how to change the line art color in this section.

Colored line work, or color holds, can be used for a variety of effects. It can highlight an area, make it blend more with the coloring, or make a background element face away to leave the foreground in the spotlight. Colored line art can make an image look much softer by not having harsh black lines in it. This is a very easy technique to use to really add punch to an illustration.

In order to follow the steps in this section, you will need line art done on a transparent layer, as shown in the following screenshot:



Figure 16.14 – Screenshot of a line drawing

The preceding image is an ink drawing scanned from paper, with the white taken out automatically using Clip Studio Paint. You can do this with a scanned image by opening it in Clip Studio Paint. If needed, adjust the brightness and contrast to make the ink lines stand out sharply from the paper color. This will also make the conversion much cleaner. Once this is done, in the **File** menu, click on **Edit** and then **Convert brightness to opacity**. Clip Studio Paint will make the brightest areas transparent and the darkest areas opaque.

Let's add colors to a line drawing with the following steps:

1. On the **Layer** palette, click on the layer with the inked lines to select it.
2. Click on the **Lock Transparent Pixels** icon, located above the list of layers. This icon is circled in the following screenshot:

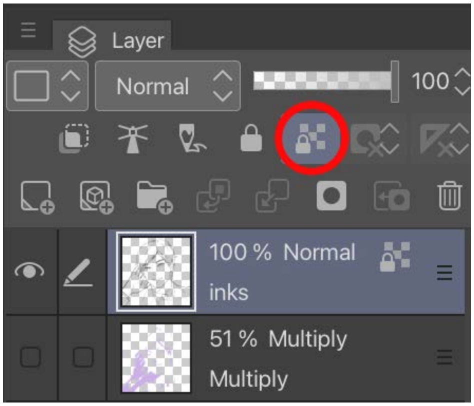


Figure 16.15 – Screenshot of the Lock Transparent Pixels icon

3. Select your preferred pen or brush tool.
4. Select the color that you wish to change your line art to.
5. Use the pen or brush over the inked lines to change the color from black to the current color.
6. To change all the lines at the same time, select the color to change the line art to and then click on the **Fill** icon in the Command Bar at the top of the Clip Studio Paint interface. This will flood all the lines at the same time.

When we lock the transparent pixels of the drawing, we prevent Clip Studio from altering the pixels that are not transparent in that layer. In this case, all ink lines are opaque, so we can only change their colors. In the following screenshot, the pink scribble across the line art was made wildly, but it only shows on the filled-in lines:



Figure 16.16 – Screenshot of the altered line color

This technique allows us to use pens, brushes, or even the gradient tools to color our lines. This drawing had a **Rainbow** gradient applied to the line layer:



Figure 16.17 – Screenshot of the rainbow line color

Color holds can also be more subtle and make line work less "in your face," like in the interior of the hair and on the face and lips in the following screenshot:



Figure 16.18 – Screenshot of an image with a changed line color

Let's see another example of changing the color of line works on an umbrella in the following screenshot:



Figure 16.19 – Screenshot of an image with a changed line color 2

You can use airbrush tools to change the line colors of the ribs of the umbrella to express shade.

> **Tip**
> Certainly, you can apply the same method on a flat color layer to change the color instantly to your desired one! But to do so, you need to have each color area as an individual layer. It all depends on your device's RAM allowance. As a guideline, 8 GB is fine, and 16 GB is very usable. With 32 GB it will be safe to work on 30 or more layers in one image and even have multiple pages open at the same time. If you can, it's always useful, and even easy, to have flat skin color, hair color, and clothing color in a different layer, then use layer masks or clipping layers to work on each section. For more on layer masks or clipping layers, go to *Chapter 12*, *Making Layer Masks and Screentones*. Now you have total color control of not only filling areas and shading or light effects, but also line art!

Summary

In this chapter, we started actually applying color to our images. We started out by discussing reference layers and how we can use them to make our color flats easier with anti-overflow brushes and bucket fill tools. Then, we explored how four of the many blending modes available in Clip Studio Paint can help us shade and highlight our images. Finally, we used the Lock transparent pixels option to make line art that wasn't flat black. You can apply these new coloring skills when you color your manga that is either digitally drawn or is a scanned image, for a more polished and professional look, and to work even more effectively.

In the next chapter, we are going to start talking about Auto Actions. Auto Actions are tools that can help you save a lot of time and effort when creating your digital art. Read on to learn how!

17
Auto Actions and Your Workflow

Auto actions are an amazing feature of digital art. They can simplify your workflow and save you time and effort when creating your drawings. What are auto actions? Auto actions are sets of recorded steps that can be played back, automating a task or tasks and completing them with the press of a button.

What sorts of tasks can be made into an auto action? Just about anything that you can dream up!

In this chapter, we will cover the following topics:

- Exploring the Auto Action palette
- Using Auto Actions
- Creating a custom Auto Action
- Downloading Auto Action assets
- Auto Action shortcuts

We are going to look at what auto actions are and how to use them to apply them to your workflow. We will learn how to create a new auto action set, download auto action assets, and then finally, create auto action shortcuts in two different ways.

By the end of the chapter, you will be able to save a lot of time by creating and using auto actions to accelerate the speed of a frequently applied set of actions. Let Clip Studio Paint do the repetitive actions automatically! It will surely make the creation of long series of manga or comics less tiring.

Let's get started!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and a new canvas opened with any line art layer and a white-colored paper layer. Any size is fine, but I recommend creating a 300-dpi square canvas to go through the content in this chapter.

Exploring the Auto Action palette

Let's start by looking at the **Auto Action** palette and what it contains.

Do you have a specific process when you create digital drawings, such as always adding a clipping mask for a clothing color layer of your character or always duplicating a line drawing layer then adding a blur effect to it? Wouldn't it be a brilliant time saver if you can let Clip Studio Paint do the set of actions automatically? Your dreams have come true. In this section, you will learn the first step of how to use auto actions, by finding the **Auto Action** palette and then opening it.

The **Auto Action** palette can be found by clicking on the **Window** heading in the **File** menu and then clicking on **Auto Action**. If this menu item is already checked, then the palette is already in the interface somewhere. By default, it is a tab in the **Layer** palette.

The following screenshot shows the **Auto Action** palette:

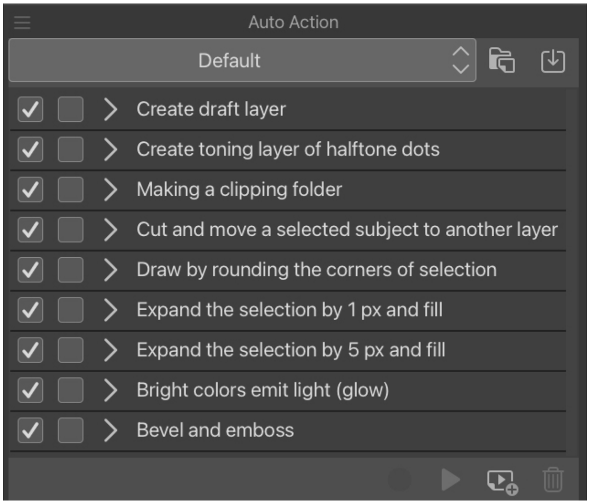


Figure 17.1 – Screenshot of the Auto Action palette

Let's break down the parts of this palette. The drop-down menu at the top of the palette allows us to switch between different sets of auto actions. The set of actions in the preceding screenshot is the **Default** set and comes included in Clip Studio Paint. The icons to the right of the drop-down menu are **Create New Auto Action Set** and **Add Auto Action Set**. The dustbin-looking icon at the bottom right is the delete button to erase a currently selected step of auto actions. Next to the delete action icon is the **Add New Auto Action Set** button, then to the left of that is the **Play Action** icon, which plays the selected action when you click on it.

For your interest, let's have a look at this **Default** auto action set:

- **Create draft layer**: This creates a new raster layer, names it, and sets it as a draft layer. Basically, it creates a foundation for sketching as in the following figure:

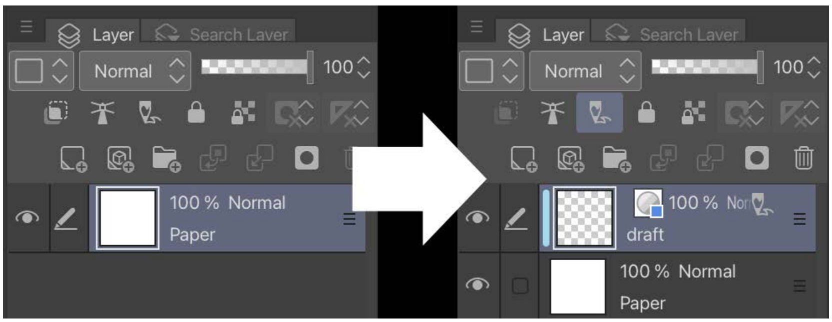


Figure 17.2 – Screenshots of the Create draft layer result

- **Create toning layer of halftone dots**: This creates a 60.0 LPI dot tone layer. So, you can start adding shade to your black and white manga by going right to creating a new layer and searching for the right screentone:

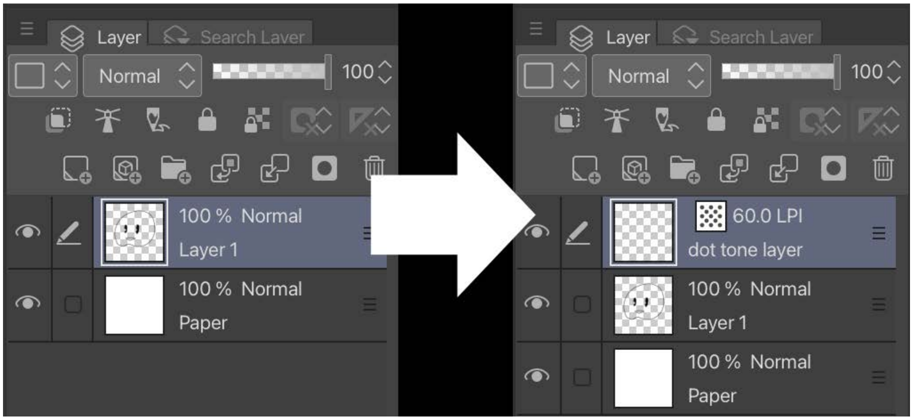


Figure 17.3 – Screenshots of the Create toning layer result

- **Making a clipping folder**: This creates two clipping layers above the selected layer, creates a folder, and puts the three layers in it. It's a process to get you ready to add extra colors without overflooding a boundary. You can add shade and shine effects safely within the flat color area you already created. The result will look as in the following figure:

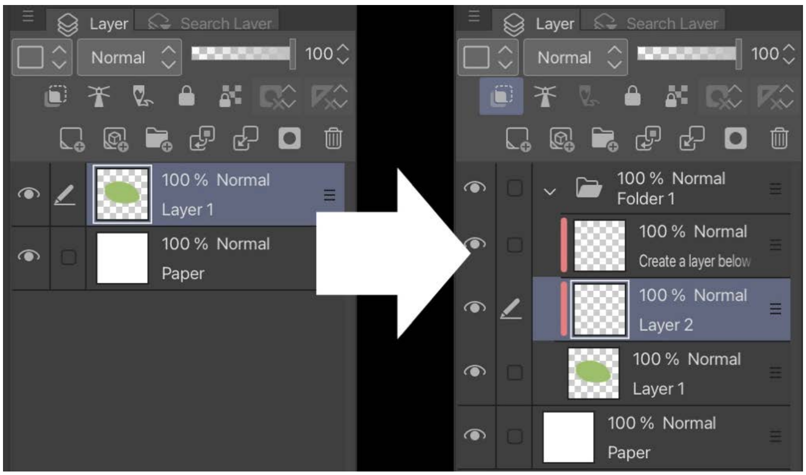


Figure 17.4 – Screenshots of the Making a clipping folder result

- **Cut and move a selected subject to another layer**: This copies and cuts out the content of the selected area, creates a new layer above the active layer, and pastes the content on the new layer. This is useful when you want to move certain content to a new layer quickly!
- **Draw by rounding the corners of selection**: This creates a shape with rounded corners of whatever the original shape of the selection area on an active layer was, with a border line of foreground color and filled with the background color. It's a good auto action for whenever you need a rounded corner manga panel! The result will look as in the following figure:

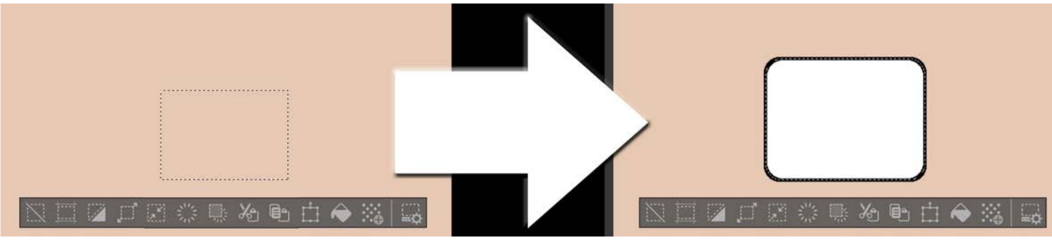


Figure 17.5 – Screenshots of the Draw by rounding the corners result

- **Expand the selection by 1 px and fill**: This makes the selected colored area expand by 1 px. It's a great solution when you have unnecessary gaps between a color and line drawings.
- **Expand the selection by 5 px and fill**: This does the same thing as the preceding auto action, but it expands the colored area to 5 px wider than the selected area.
- **Bright colors emit light (glow)**: This adds a dramatic glow expression to the lighting of your drawing. It duplicates the active layer, adds extra light blurring effects with **Gaussian blur** to one layer, merges the layer with another layer, then turns the layer blending mode to **Add**.
- **Bevel and emboss**: This instantly adds a 3D effect to the drawing in the active layer. This is an easy way to add a lighter area to the top-left side and a shade to the bottom right. The magic is done by creating a lighter-color copy layer of an original layer and moving it to the upper left slightly, then creating a darker-color copy of the original layer and moving it to the lower right slightly, then finally merging the copies into one layer.

Now you have some ideas of what auto actions are and how to find them, and what the **Default** action set is and what it offers.

Let's have a look at how to use auto actions.

Using Auto Actions

In this section, we are going to learn how to actually use auto actions with the eighth auto action in the **Default** set, **Bright colors emit light (glow)**, because it's the easiest action set to see the result of.

In the main window of the **Auto Action** palette are the names of the auto actions we can choose from. The right-headed arrow to the left of the action's name can be clicked on to view the recorded steps that comprise the action. In the following screenshot, the steps under the **Bright colors emit light (glow)** action are shown:

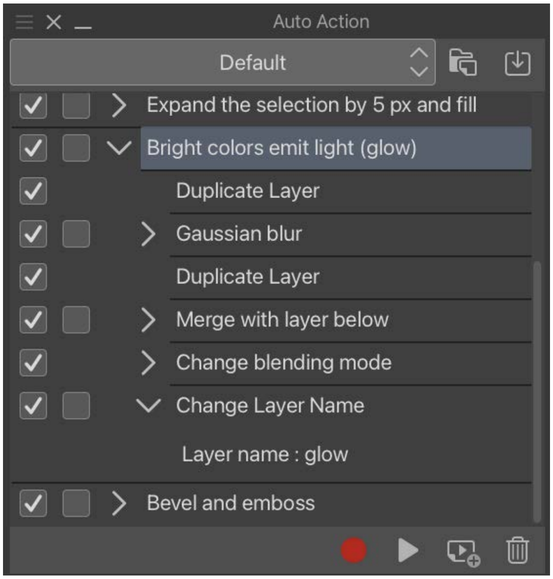


Figure 17.6 – Screenshot of the Auto Action palette 2

In the preceding screenshot, you can see that there are two rows of checkboxes on the left-hand side of the palette, next to the names of both the auto actions and the steps that they are comprised of. The first column (the one that has all the boxes checked in the screenshot) controls which steps or which entire actions are able to be played. If the checkbox is empty, then that step or action will not play.

The second column of checkboxes indicates whether a step will produce a dialog box where we have to enter information or make a choice. In the screenshot of the **Bright colors emit light (glow)** action, for example, if we click on the second column of checkboxes next to the **Gaussian blur** steps, then when these steps come up in the action set when it's played, we will get to set the options ourselves before the action continues.

When we select an action and click on the **Play Action** button at the bottom right of the palette, or double-click the action name, the action steps will play on the currently active layer or selection. In the following figure, the white lighting effect layer on the left has had the **Bright colors emit light (glow)** action applied to it, which you can see in the result on the right, making the white lighting effect have a dramatic glow:



Figure 17.7 – Screenshots of before and after an auto action is played

> **Tip**
> Some actions require you to have an active selection made for them to work on, instead of just playing on an entire layer. Most actions that require an active selection in the **Default** action set have *selected area* in the title, so look for this clue when playing actions!

We will look at two more **Default** auto actions to understand the variety of actions you can use.

The fourth option of the **Default** set is named **Cut and move a selected subject to another layer**, which, as was already mentioned in the previous section in this chapter, cuts out a selected area from the active layer and pastes it on a new layer. As you can see in the following figure, you can move the hair part from the **flats** layer with one click of the **Play Action** button:

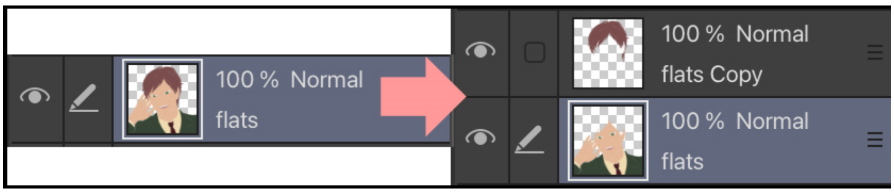


Figure 17.8 – Screenshots of before and after an auto action is played 2

This will help you work on a particular area separately from other parts, such as adding a different type of shade or lighting effect to part of a character's hair.

Another **Default** auto action is **Bevel and emboss**, which adds an instant 3D effect to a simple shape drawing, as you can see in the following figure:

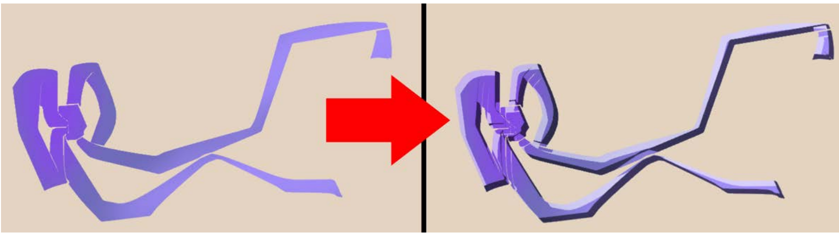


Figure 17.9 – Screenshots of before and after an auto action is played 3

The auto action added a lighter area to the top-left side and shade to the bottom right instantly!

Now that we know the uses of actions and some of the things we can do with the **Default** actions, let's create a custom action in the next section.

Creating a custom Auto Action

We're going to create a custom action that will set up a new file with a rough sketch, a final sketch, and ink layers with the press of a button. You can make almost anything into an auto action, whether it's a few button presses or a longer and more complicated series of steps. By following along with the instructions in this section, you'll build the foundational knowledge you need to start creating your own actions in the future.

Before making an action of your own, complete the steps of the action a few times to make sure that you know the process and can streamline out any unnecessary steps or mistakes in its creation. This pre-planning step can help save a lot of troubleshooting later on!

Actions are sets of menu commands executed on an existing layer or selection. Some settings and commands, such as setting the brush size, cannot be recorded. If a tool or layer is changed via a palette, this might not be added to the auto action recording.

Follow these steps to complete making this new auto action set and action. You will need to create a new, blank file before completing these steps:

1. In the **Auto Action** palette, click on the **Create new auto action set** icon to the right of the set drop-down menu. (Note that you can add new actions to the **Default** folder, but for the sake of organization you can also put your own actions into a new set.)

2. Name the new set `Custom` when the dialog box appears and click on **OK** to finish creating the new set. The **Create new set** dialog box is shown in the following screenshot:

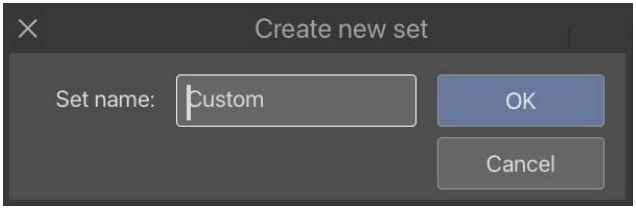


Figure 17.10 – Screenshot of the Create new set window

3. While in the new action set, click on the palette menu in the upper-left corner of the palette. In this menu, click on the **Add auto action** option to create the new action.
4. Name the new action by typing a name into the text entry box. For this example, we are naming our action `Layer Set Up`, as shown in the following screenshot:

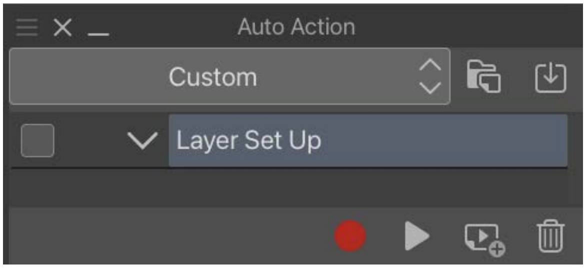


Figure 17.11 – Screenshot of the Layer Set Up set

Now that you have the new empty action in your **Custom** action set, we can begin recording the action steps!

5. Click on the red circle icon at the bottom of the palette, the **Start to record auto action** icon, to begin logging the steps. Once the recording has begun, this circle icon will turn into a square.

6. Create a new raster layer, then rename the layer `Rough Sketch`. Click on the **Set as draft layer** icon on the **Layer** palette, which is circled in the following screenshot:

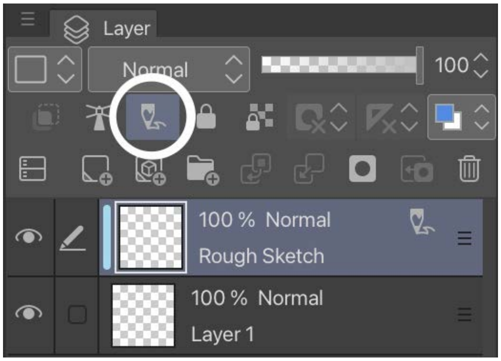


Figure 17.12 – Screenshot of the Set as draft layer icon

7. Create a new raster layer above the one created in *step 6*. Rename this layer `Final Sketch`.
8. Create a new raster layer above the one created in *step 7*. Rename this layer `Inks`.
9. Select the **Rough Sketch** layer in the **Layer** palette to make it the active layer.
10. Go back to the **Auto Action** palette and click on the record button again (it is now a square instead of a circle – a square was commonly used in older technology to mark the **stop** button!) to stop the recording. The steps beneath the **Layer Set Up** action should look as in the following screenshot:

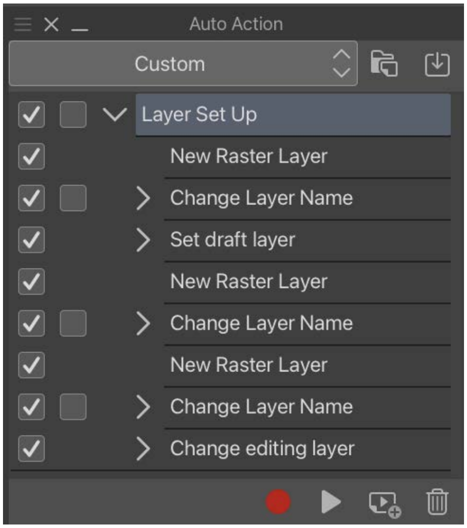


Figure 17.13 – Screenshot of the Layer Set Up auto actions

11. Open a new canvas and then go to the **Auto Action** palette. Click on the name of the **Layer Set Up** action, then click on the triangular **Start to play auto action** icon in the palette to play the action.
12. If the auto action has recorded correctly, the **Layer** palette of the new page should look as in the following screenshot:

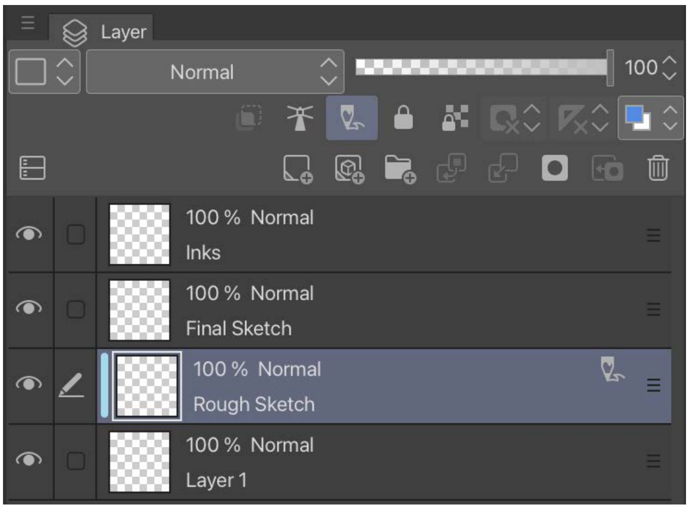


Figure 17.14 – Screenshot of the Layer Set Up auto action result

How easy it is to create a new auto action and record it! Just click the **Create new auto action set** icon, name it, press the record button to let it memorize all the processes, and then press the stop button.

What steps do you find yourself tediously completing over and over again? Do you get tired of having to manually resize your comic's dimensions before saving it to upload to your website? Do you have a set of steps that you go through a lot to make a special effect? Any process, from the simplest to the most complex, can be made easier with auto actions. Try making some of your own to use in your creation process!

You can also download auto action assets from the Clip Studio Assets; read on to find out how.

Downloading auto action assets

There are tons of assets available on the Clip Studio Assets to download to use in your art. You will find out more about its features in *Chapter 18*, *Exploring the Clip Studio Assets and Animation*, but for now, let's concentrate on downloading and using auto action assets. Follow these steps:

1. Go to the Clip Studio Assets by clicking its icon on the Command Bar, as shown circled in the following screenshot:

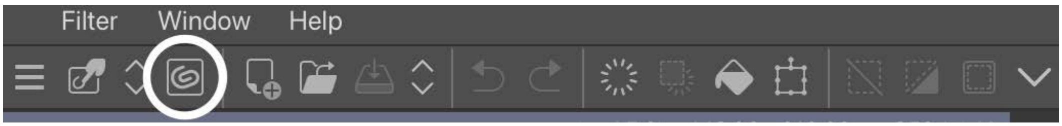


Figure 17.15 – Screenshot of the Command Bar

2. If asked, enter your Clip Studio username and password, then click **CLIP STUDIO ASSETS** on the menu on the left, as pointed to in the following screenshot:

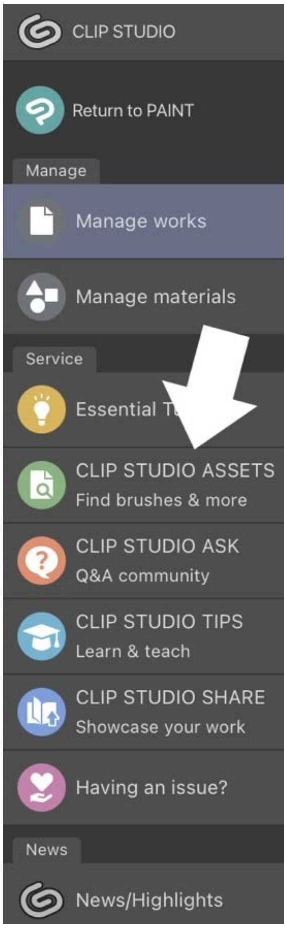


Figure 17.16 – Screenshot of the CLIP STUDIO ASSETS menu

3. When you click **CLIP STUDIO ASSETS**, a new screen appears with a search bar and newly uploaded assets in thumbnails underneath it. Type `Auto` or `Autoaction` in the search bar and hit the *Enter* button on your keyboard.
4. Now you can see the auto action assets in thumbnails lined up. Scroll down to find anything you would like to use on your art. For now, choose an asset that shows the word **FREE** under the thumbnail, then click on the thumbnail to see the asset details.

5. If you are fine with the details, click the **Download** button in the upper left-hand corner in red to start downloading the asset.
6. Keep in your mind that downloading assets might take a while. After downloading is finished, return to Clip Studio Paint by clicking **PAINT** on the left-side menu.
7. In Clip Studio Paint, in the **File** menu, click **Window**, then click **Material** in the **Window** drop-down menu to bring up the Material palette to check whether the asset has been added to your Material palette.
8. In the Material palette, click on the arrow next to the word **All materials** if you can't find the **Download** category. If you click **Download**, the most recently downloaded asset will be displayed on the right, as in the following screenshot:

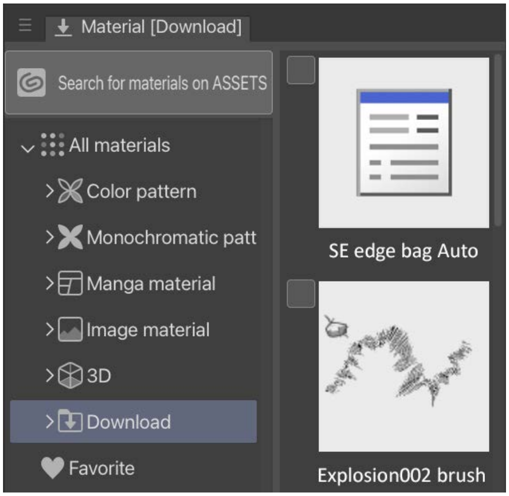


Figure 17.17 – Screenshot of the Material palette

9. Click the newly downloaded auto action asset thumbnail and click the **Paste material to canvas** icon at the bottom of the **Material** palette, which looks as in the following screenshot:

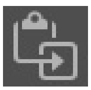


Figure 17.18 – Screenshot of the Paste material to canvas icon

10. Once you press the **Paste material to canvas** icon, the following window will pop up to ask whether you want to add the auto action asset to your **Auto Action** palette; click **OK** to confirm it:

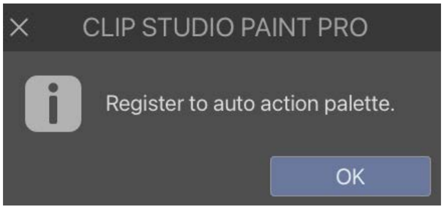


Figure 17.19 – Screenshot of the confirmation window

To check whether the asset has been added to your **Auto Action** palette safely, go to the **Auto Action** palette as we learned in the first *Exploring the Auto Action palette section*, of this chapter, then click the drop-down menu at the top of the palette. You will see the name of the asset there as in the following screenshot:

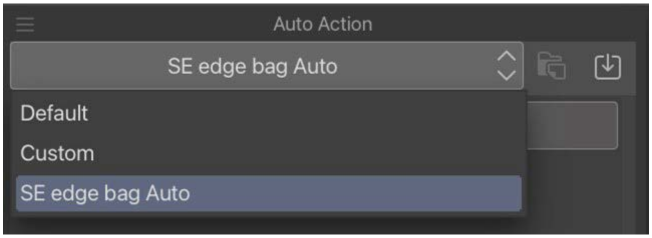


Figure 17.20 – Screenshot of the Auto Action palette

Now you can use not only the **Default** auto actions and the ones you created but also the ones you downloaded!

Let's have a look at the ways to access your favorite auto action quickly!

Auto action shortcuts

If you have auto actions that you use all the time, you can assign them to shortcut keys or even add them to the Command Bar at the top of the Clip Studio Paint interface.

In the next two sections, we are going to take the **Layer Set Up** action we created previously and create two shortcuts for it – one keyboard shortcut and one Command Bar shortcut! This is an easy process and will cut down the amount of time you spend going through palettes, trying to find the commands that you use most often. Let's look at both of these processes to create easy access to our auto actions.

Creating a keyboard shortcut

Follow these steps to create a keyboard shortcut for an auto action:

1. In the **File** menu, click on **CLIP STUDIO PAINT** or its icon and then click on **Shortcut Settings…** in the drop-down menu to open the keyboard shortcut preferences.
2. In the **Category** drop-down menu, select the **Auto actions** option.
3. Click on the arrow to the left of the auto action set name to view the actions under that set name. In the following example, we are looking at the actions under the **Custom** set to find the **Layer Set Up** action we created earlier:

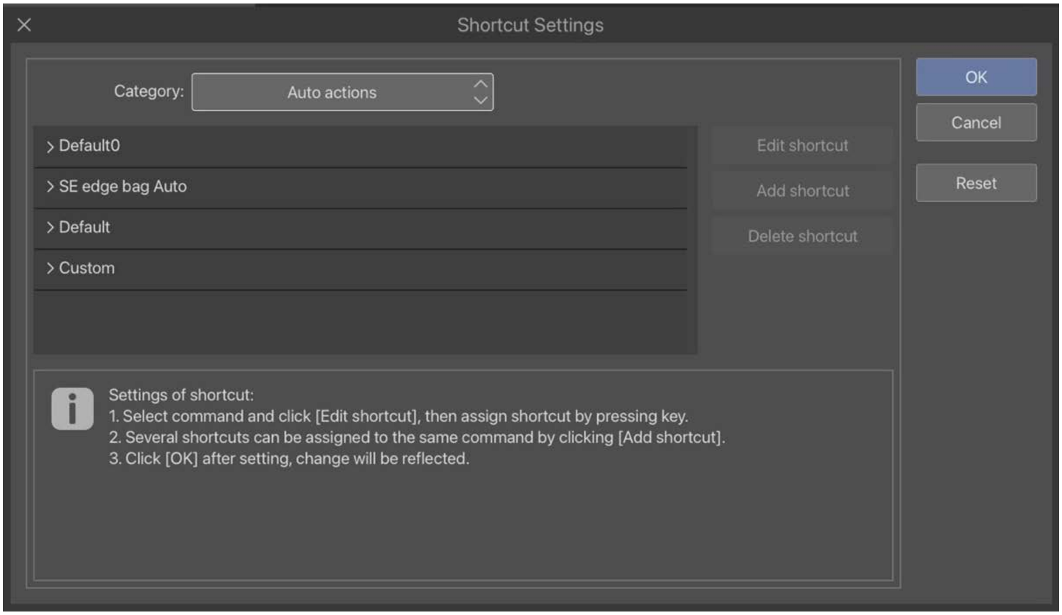


Figure 17.21 – Screenshot of the Shortcut Settings window

4. Click on the **Layer Set Up** name to select it. Then, click on the **Add shortcut** button.
5. On the keyboard, press the key or combination of keys you'd like to use for the shortcut. In this set of instructions, we are going to use the *Ctrl* + *F1* combination of keys to activate our auto action. This shortcut now shows next to the **Layer Set Up** auto action's name in the following screenshot:

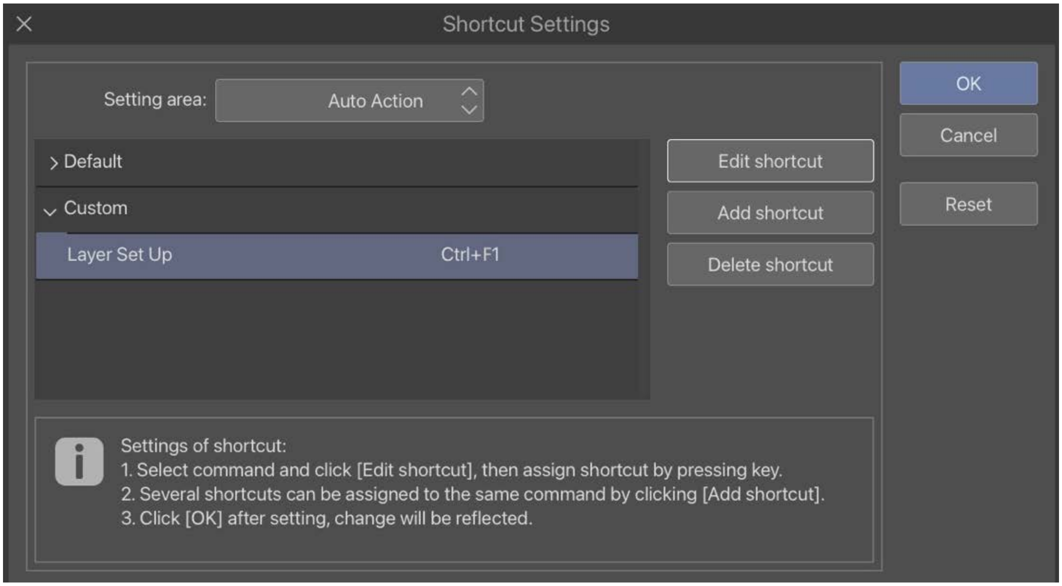


Figure 17.22 – Screenshot of the Shortcut Settings window 2

6. To edit the existing shortcut to something else, click on **Edit shortcut** and choose a new shortcut.
7. To add another shortcut to the same auto action, click on the **Add shortcut** button and press another key or combination of keys to set a second shortcut.
8. To delete a shortcut, select the shortcut and then click on the **Delete shortcut** button.
9. Once you have finished setting shortcuts, click on the **OK** button to exit **Shortcut Settings**.

Now, when you hold down the *Ctrl* button and press *F1* on the keyboard, your **Layer Set Up** action will play.

Read on to find out about another shortcut you can create!

Creating a Command Bar shortcut

It's nice to be able to see your frequently used shortcuts on the Command Bar. To add a shortcut icon to the Command Bar, follow these steps:

1. In the **File** menu, click on **CLIP STUDIO PAINT** or its icon and then click on **Command Bar Settings…** in its drop-down menu to bring up the **Command Bar Settings** menu.
2. In the drop-down menu at the top of the settings menu, select the **Auto Action** option to view the auto actions.
3. Click on the arrow next to the action set to view the names of the auto actions beneath that set. In the following screenshot, we are looking in the **Custom** set for the **Layer Set Up** action:

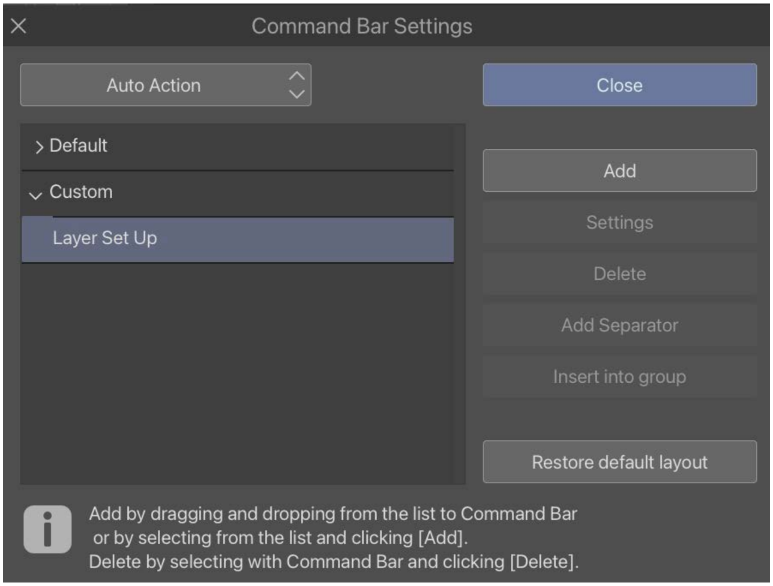


Figure 17.23 – Screenshot of the Command Bar Settings window

4. With the name of the auto action selected, click on the **Add** button.
5. The shortcut icon will now show in the Command Bar, as shown circled in the following screenshot:



Figure 17.24 – Screenshot of the Command Bar

6. To delete a shortcut, press and hold the shortcut icon to open a drop-down menu, and then click **Delete**.

Wow, how accessible to get the auto action done on your layers. You can either press and hold the *Ctrl* key and then press the *F1* key or click on the icon in the Command Bar to run the **Layer Set Up** action without having to select it from the palette.

Summary

In this chapter, we learned how to make tedious activities more bearable by using recorded auto actions to automate their steps. We looked at the **Auto Action** palette and learned how to play a default action. We learned how to create a new auto action set, how to create a new auto action and record the steps for it, and then how to download an auto action asset. Finally, we learned how to create two different shortcuts to an auto action in order to make accessing it easier.

In the next chapter, we will explore the animation features of Clip Studio Paint and also learn how to import materials and other assets from the Clip Studio Assets.

18
Exploring the Clip Studio Assets and Animation

Two of the most exciting features added to Clip Studio Paint in the past few years are Clip Studio Assets, which allows the fast and easy downloading of new brushes and other assets, and the ability to create animations in the program. In this chapter, we will explore both options and how to use them.

The following topics will be covered in this chapter:

- Clip Studio Assets
- Creating an account and logging in
- Downloading from Assets
- Creating animations
- Exporting animations

We will start this chapter by looking at what Clip Studio Assets is, then how to create an account and log in to Assets. Then, we are going to learn about the interface of Assets, and how to search for assets you want, even actually downloading a sample asset. We will move on to get to know ways to create an animation in Clip Studio Paint with two example steps, and finally, learn how to export the animation.

By the end of this chapter, you will have useful knowledge of how to get materials to use on your creations, and you'll be able to start creating an animation using an image you have created!

Let's jump right into these amazing features!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and to create a canvas of 1280 x 720 px with 144 dpi with character art and background art in separate layers to go through the content in this chapter.

Digging into Clip Studio Assets

In this section, we will have a look at Assets and what it contains. Clip Studio Assets is the screen that we open before getting into Clip Studio Paint. Assets is our one-stop shop for new assets and materials, as well as updates from the creators of Clip Studio Paint.

The Clip Studio Assets screen shows a list of programs that looks like the following screenshot:

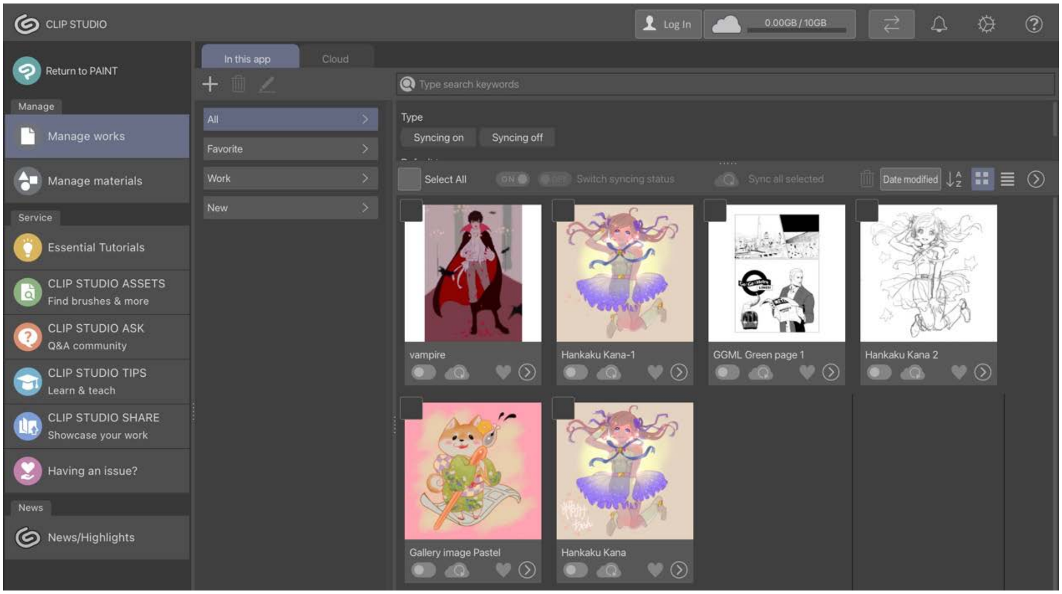


Figure 18.1 – Screenshot of Clip Studio Assets

On the left side of the window, we have a Clip Studio Assets menu. The preceding screenshot is the iPad version, but for Mac and PC versions, you will see recent Clip Studio **News/Highlights** from Celsys, which is the company that produces the Clip Studio series, containing new patches and upgrades, as well as contests run by Celsys and other articles produced by them, below your recent artwork thumbnails.

Let's see a close up of the Clip Studio Assets menu and a breakdown of the list:

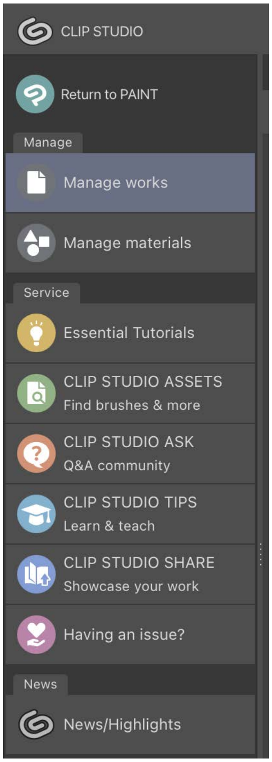


Figure 18.2 – Screenshot of the Clip Studio Assets menu

- **Return to PAINT**: This takes you back to the Clip Studio Paint screen.
- **Manage works**: This is currently selected. It shows the artworks recently created. You can add particular works to your favorites and sync them to your cloud storage.
- **Manage materials**: This shows your material palette.
- **Essential Tutorials**: This shows a page with the most essential techniques in step-by-step tutorials for Clip Studio Paint beginners.
- **CLIP STUDIO ASSETS**: This shows a page full of material assets you can download, which we will explore more in this chapter.
- **CLIP STUDIO ASK**: This shows a page you can ask questions about particular techniques or troubleshooting for using Clip Studio Paint and Assets. There are also tons of Q&As you can search by typing some keywords in a search bar for related topics.

- **CLIP STUDIO TIPS**: This shows a page full of useful tips from the Clip Studio Paint creators, categorized as **Concept Art & Painting**, **Character Art & Drawing**, **Comics & Manga**, **Animation**, and **Official Tips & Tutorials** (which is a link to the **Essential Tutorial** page). If you have your own tips to share, you can add yours too!
- **CLIP STUDIO SHARE**: This shows a tutorial on how to upload your work on their site and share the URL to your social media. Celsys also provides services such as creating easy-to-view manga pages on mobile and binding them in a digital 3D book. We will learn more in the next chapter, *Chapter 19*, *Exporting, Printing, and Uploading Your Manga*.
- **News/Highlights**: This shows new patches and upgrades, as well as contests run by Celsys and other articles produced by them.

Well, all of them look very helpful to your creative life!

In the next section, we will concentrate on creating a Clip Studio account and downloading new assets from the Assets library.

Creating an account and logging in

Before we can download new assets from Clip Studio Assets, we must create an account with Celsys. This is an easy process that is fast, and best of all, it's free!

To start the process of creating an account, follow these steps:

1. Go to the **CLIP STUDIO ASSETS** screen.
2. In the top middle of the screen is a button labeled **Log In**. Clicking on it will bring up the following window:

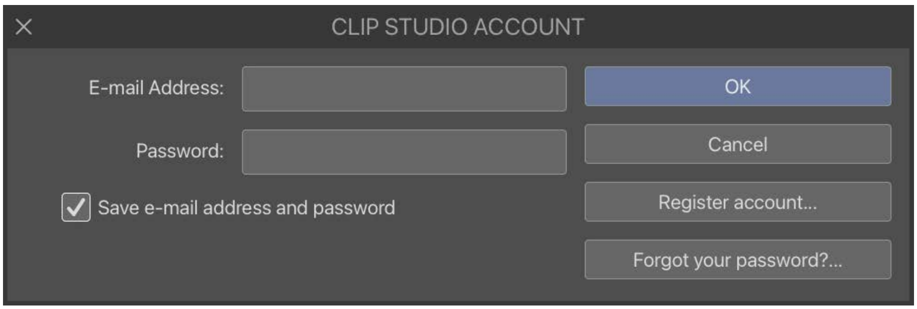


Figure 18.3 – Screenshot of the login window

3. To create a new account, click on the **Register account...** button. Your internet browser will open the Celsys website.

4. Enter the required information on this page to create your account. You may need to verify your email address after account creation before you can log in to Clip Studio Assets.
5. Once you have registered and verified your account, enter the email address and password from your registration details into the appropriate fields in the **Log in** window. Checking the **Save e-mail address and password** box will ensure that your information is saved for quick login later.

> **TIP**
> Do not save your email address and password to Assets if you are using a public or shared computer. Someone with this information could change your Celsys login details or download tons of materials to the computer. Some of the assets in Clip Studio Assets are premium content and cost money, so consider these things before saving your details in Assets. If your computer is private and you are the only user, saving your details can make logging in much faster and easier.

6. Once your login details are entered, click on the **OK** button to log in.
7. If you have an account but can't remember the password, click on the **Forgot your password?...** button to complete the password retrieval process.

Now that we're logged in to Assets, we can search for and download new assets. We will see how to do this in the next section.

Downloading from the Assets

Clip Studio Assets assets include user-created brushes, materials, 3D objects, sound effects, and more that can be downloaded for use in your own works.

In this section, we are going to learn how to use Clip Studio Assets by searching, downloading, and registering materials that are ready to be used!

To access the materials available for download, click on the **Assets** link in the left-hand menu of Clip Studio Assets. The following screenshot shows the Assets library at the time of writing:

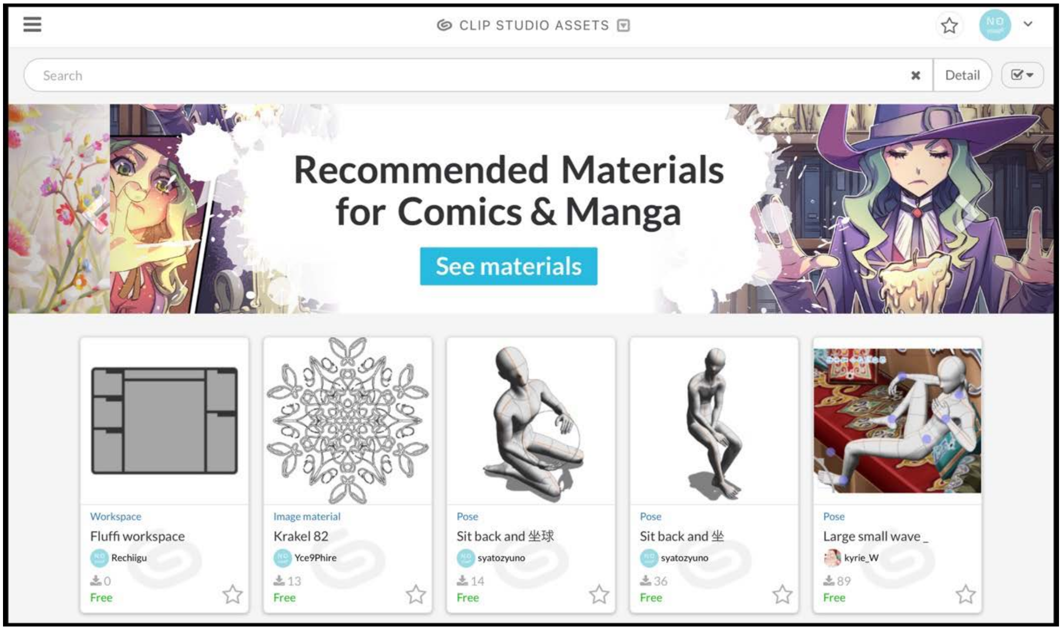


Figure 18.4 – Screenshot of the Assets library

Each asset has a thumbnail showing us what the asset looks like. Beneath the thumbnail image, we have information about the asset. The first line tells us what type of asset it is (Pose, Workspace, Image material, Brush, and so on). The next line tells us the name of the material. The third line tells us the username of the person who created and uploaded the asset to the online library. The next line tells us how many times that asset has been downloaded, and the final line tells us the cost of the asset.

Important note

Many of the items in the Assets download library are free. However, some assets need special currencies such as Clippy or GOLD. You can collect Clippy points by doing some activities on Clip Studio Assets such as uploading materials you made, but GOLD costs money. In order to download priced assets, you first have to purchase "GOLD" from Celsys. At the time of writing, 1,000 GOLD costs around $10 USD. GOLD has an expiration date that is normally 1 year time from the day of purchase, so if you purchase GOLD, be sure to use it all before it expires!

To search for a specific asset, type a keyword or keywords into the **Search** bar at the top of the Assets window. Press the *Enter* key on your keyboard to complete the search. The button marked **Detail** to the right of the search bar can be clicked and then used to narrow the search results. For instance, in the following screenshot, we have entered the search keyword `heart`. If we only want to see brush assets that match that keyword, click on the **Brush** option under the **Detail** window as in the following screenshot. This will filter the search results accordingly:

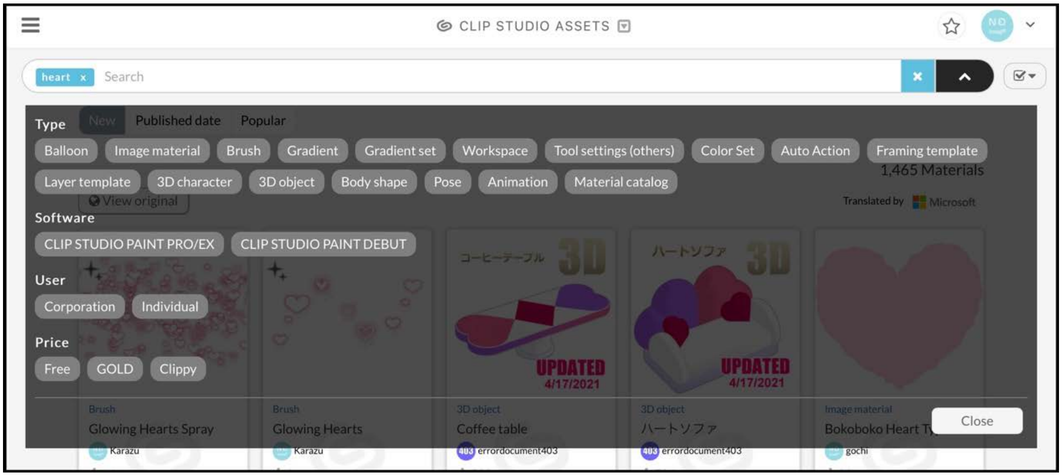


Figure 18.5 – Screenshot of Search options

There is also a very useful way to pick good assets quickly, which is changing the order of displayed search results, as you can see from the three options in the following screenshot:



Figure 18.6 – Screenshot of search result order options

If you select **New**, the most recently added assets will be displayed in the search results. Selecting **Published date** will show you the most recently published assets first. Selecting **Popular** will show you the most downloaded assets first.

So, if you want to have a browse of the most popular free heart-shaped brushes first, you can type `Heart` in the search bar, hit *Enter* on your keyboard, select **Brush** and **Free** from the **Detail** drop-down options, then click the **Close** button. Finally, click **Popular** from the display order options and the assets most likely to meet your needs will be displayed at the top!

> **Important information**
> As of 2021, Clip Studio Assets now auto-translates material names to English, French, German, Spanish, Korean, Traditional Chinese, or Japanese. When you click on a material, you will see the translated name and the original name in brackets. Materials also now have a unique Content ID that users can enter in the search bar to find specific materials. If this doesn't return what you're looking for, then it may be up to you to make that asset and put it out there for others to download! This is a great way to show off your Clip Studio skills, and you can make a little extra money too if you create a paid asset that lots of people download.

Once we locate an asset that we might be interested in downloading, we can click on the thumbnail to view more details about it. The asset in the following screenshot is **Retro Chip Brush**, which looks pretty good:

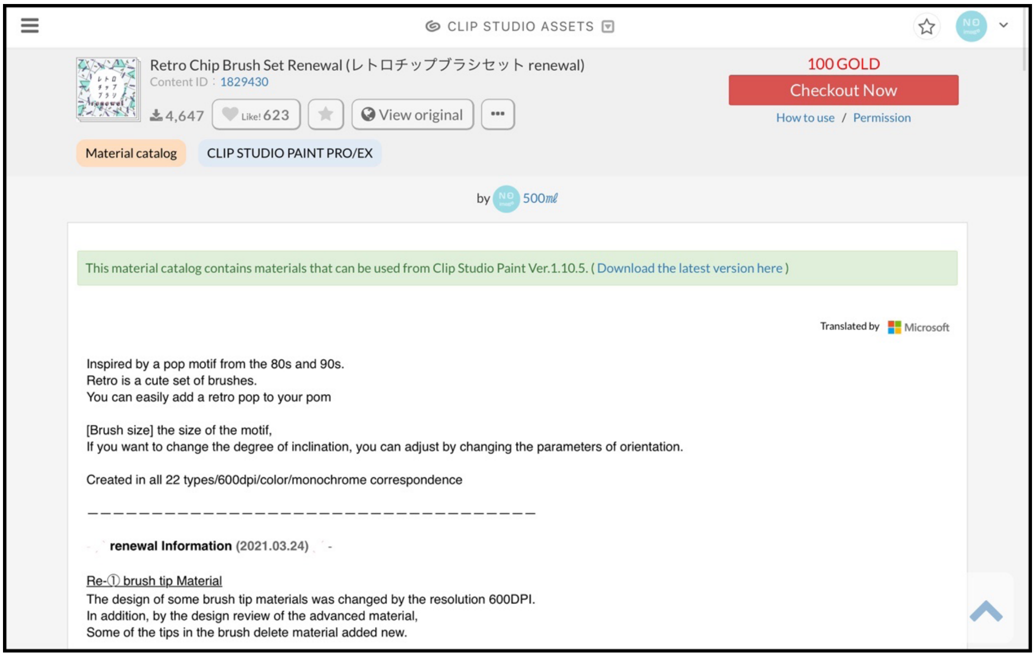


Figure 18.7 – Screenshot of the Retro Chip Brush asset details

From this detail window, we can add a **Like!** to the asset by clicking on the heart button (and we can see how many likes the asset has, too). We can add the asset to our favorites by clicking on the star-shaped button. Favorites can act as a sort of wish list of paid assets, if you like.

Scrolling down further will give us more information about the asset we wish to download. Most users will include more thumbnails and ideas on how to use the asset in an image. Be sure to look at this information before deciding to download an asset.

The Retro Chip Brush asset is a paid asset, so we would need to have GOLD in our account to download this brush. In **Free** assets, we will see a **Download** button at the top right of the screen. Clicking on the **Download** button of a free asset, or the **Checkout Now** button on paid assets, will allow you to download them.

Once you've started downloading an asset, open the **Communication Manager** window to see the status of your downloads by clicking the button with two arrows with a green mark, which is pointed to in the following screenshot:

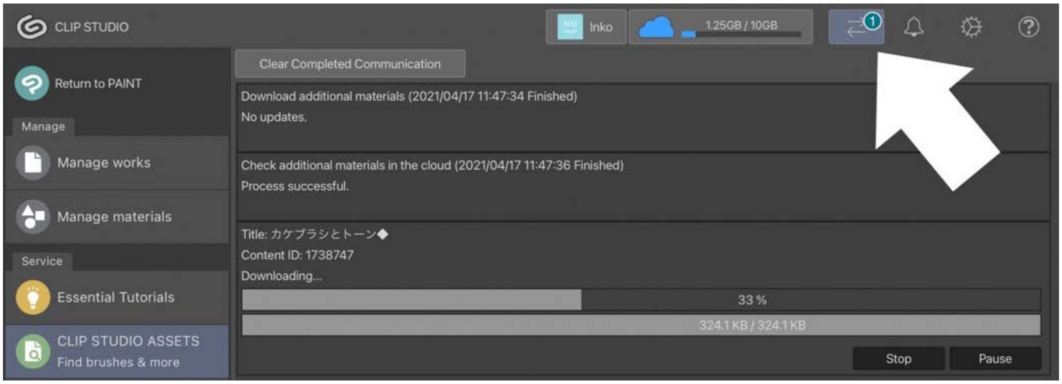


Figure 18.8 – Screenshot of the Communication Manager window

Any downloading and recently downloaded items will show in this window. We will see the name, content ID, and progress bar for a currently downloading item, and the name, date, and time that the download occurred, the status of the download, and the status of the process, which shows whether the process was successful or not, for already downloaded items. Check this to make sure that the download was successful before trying to download the asset again.

Now that we have downloaded an asset, we need to locate it in the Material palette in Clip Studio Paint.

Locating your downloads in Clip Studio Paint

When we download an asset to Clip Studio Paint, it goes into our Material palette. Click the **PAINT** icon on the left-side menu of the **CLIP STUDIO ASSETS** screen to go back to the Clip Studio Paint screen. In Clip Studio Paint, open the **Material** palette and click the arrow next to the word **All materials** if you can't find the **Download** category. If you click **Download**, the most recent downloaded assets will be displayed on the right as in the following screenshot:

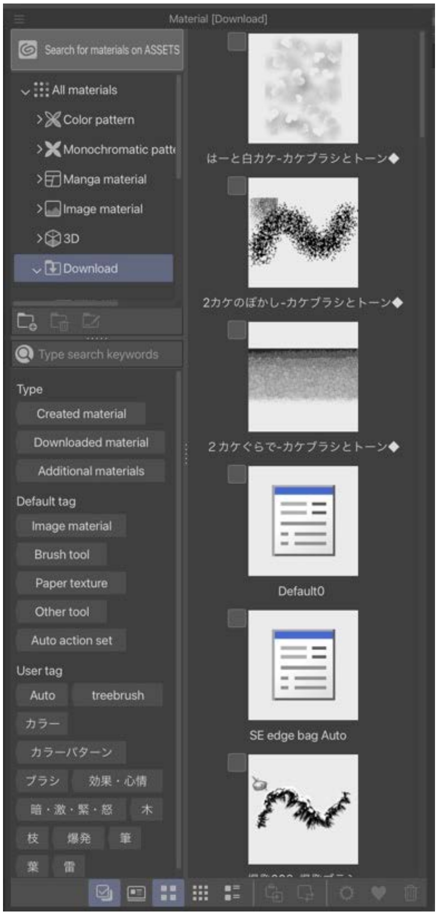


Figure 18.9 – Screenshot of Material palette

If the asset you downloaded was an image, pattern, or 3D asset, you will be able to use it right away from the Material palette. If it was a brush asset, you still need to register that asset to one of the **Sub Tool** palettes. This is a very simple process. To register the brush material, follow these easy steps:

1. Open the **Sub Tool** palette to show the group of tools that you wish to register the new brush asset to. We will be registering a new **Decoration** asset in this instruction.
2. In the **Download** section of the Material palette, click on the thumbnail of the brush asset you want to register to Sub Tool.
3. Click and hold the thumbnail and maintain the pressure, then drag it to the **Sub Tool** palette without letting go of it. Once it comes over to the **Sub Tool** palette, you will see a + symbol appear next to the asset you are dragging. Release the pressure now.
4. The new asset will be registered to the **Sub Tool** palette. In the following screenshot, we can see the brush from the previous screenshot is now in the **Decoration Sub Tool** category:

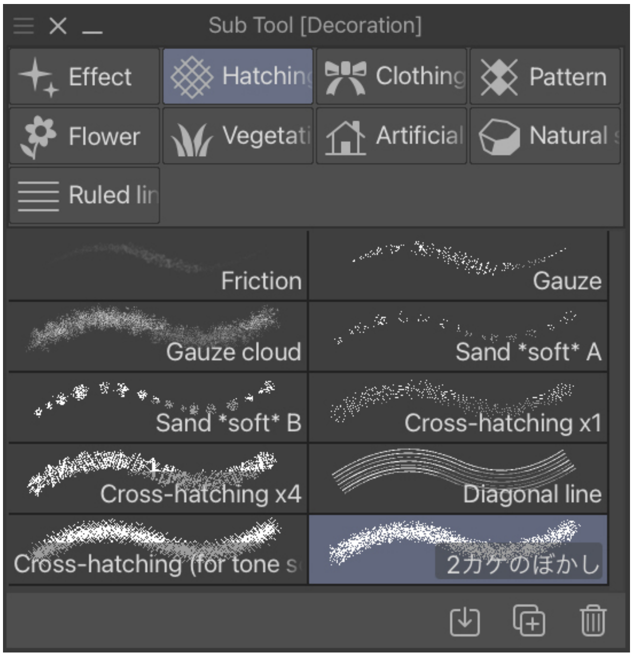


Figure 18.10 – Screenshot of the Decoration Sub Tool palette

Isn't it fantastic to be able to access tons of materials that will help your creations? First, we started with the **CLIP STUDIO ASSETS** screen to learn what it is for, and what it offers. Then, we moved on to learn how to create an account and log in to use Assets, and how to search for asset materials. And finally, we learned how to download and register a brush material. To be honest, I could spend all day searching and collecting fancy and useful materials, because it's so much fun and inspiring.

In the next section, we will have a look into how to create animations in Clip Studio Paint. Read on to explore this great feature!

Creating animations in Clip Studio Paint

In this section, we are going to learn how to create animations using the **Layer** and **Timeline** palettes in Clip Studio Paint with two examples.

Animation, another way of saying moving image, is a very complex art form that requires lots of study and practice to get it right. There are many books and internet resources on how to animate, the principles of animation, and tips for animating well. These things are beyond the scope of this book. However, we can explore how to create a Clip Studio file with an animation timeline and then add animation cels to make our pictures have the appearance of motion.

> **Important note**
>
> When working in Clip Studio Paint Pro, your animation frames are limited to only 24 in a timeline. Clip Studio Paint EX can create unlimited animation frames in a timeline.

We will learn two different ways of creating animations from your art. One is by using an image, and another is by using the camera movement feature.

Creating an animation using one image

You can either start a new file just for animation or add animation to an existing piece of artwork. In this section, we will use your existing artwork. Follow the steps to create your first animation:

1. First, create a canvas of 1280 x 720 px at 144 dpi. You need your artwork to have character and background drawings in separate layers as in the following screenshot:



Figure 18.11 – Screenshot of an illustration with the Layer palette

2. Click the **New Raster Layer** icon twice in the **Layer** palette. You can see the icon circled and the resulting **Layer** palette in the following screenshot:

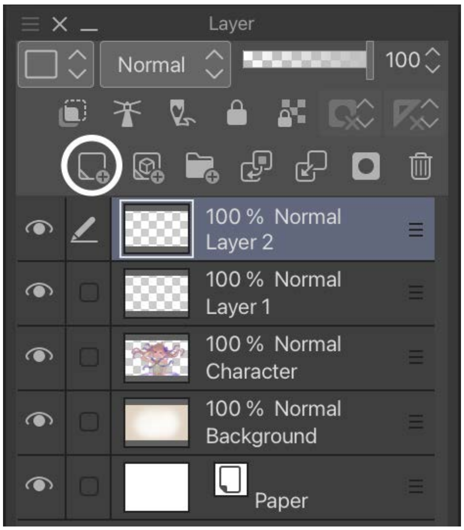


Figure 18.12 – Screenshot of the Layer palette

3. To make things simple, double-click the new layer names and rename them as `1` and `2` as in the following screenshot:

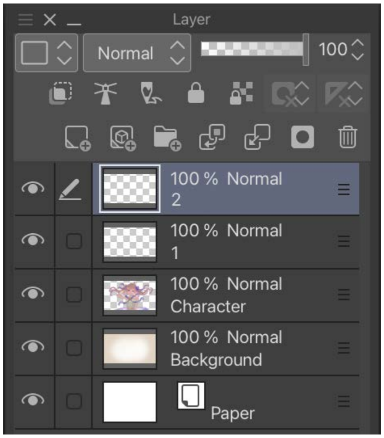


Figure 18.13 – Screenshot of Layer palette 2

4. Draw elements you want to animate on **Layer 1**. I drew pink stars in this example as you can see in the following screenshot:

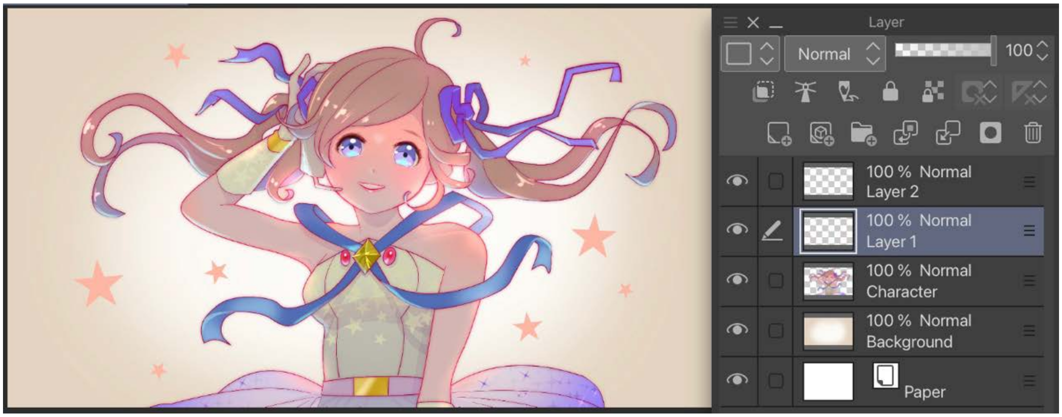


Figure 18.14 – Screenshot of added elements

5. Change the opacity of **Layer 1** to around **30 %** by moving the slider bar at the top of the **Layer** palette and draw the variation of the image in **Layer 2** with the half translucent **Layer 1** as a reference:



Figure 18.15 – Screenshot of added elements 2

6. Don't forget to change the opacity of **Layer 1** back to **100%** after you have finished drawing on **Layer 2**.

7. In the **File** menu, click **Animation**, then **New animation layer**, and finally, **Animation folder** to create an animation folder named **Folder 1** in the **Layer** palette as in the following screenshot:

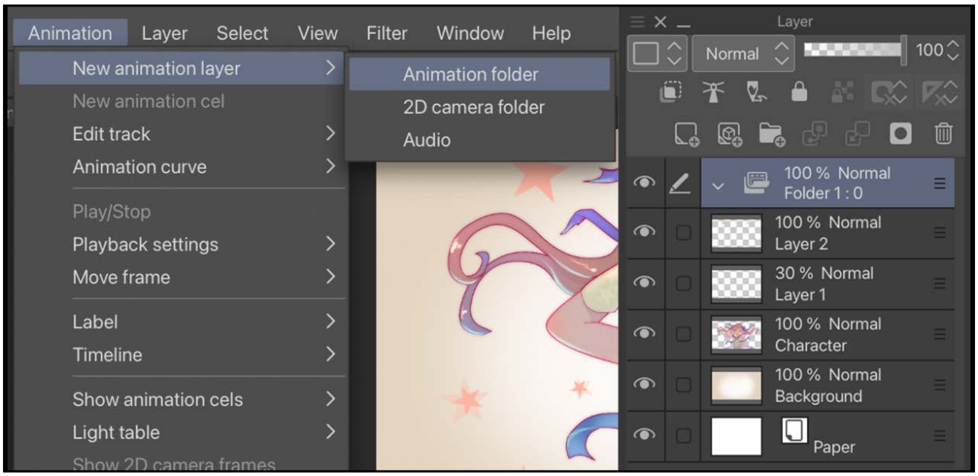


Figure 18.16 – Screenshot of the Animation drop-down menus and Layer palette

8. On the **Layer** palette, select both **Layer 1** and **Layer 2**, and click then hold to drag them and release them in **Folder 1**.
9. Once the two layers are safely stored in **Folder 1**, make the folder hidden by clicking the eye-shaped icon of the folder.
10. Click **Window** from the **File** menu, and click **Timeline** from the drop-down menu to open the **Timeline** palette as in the following screenshot:

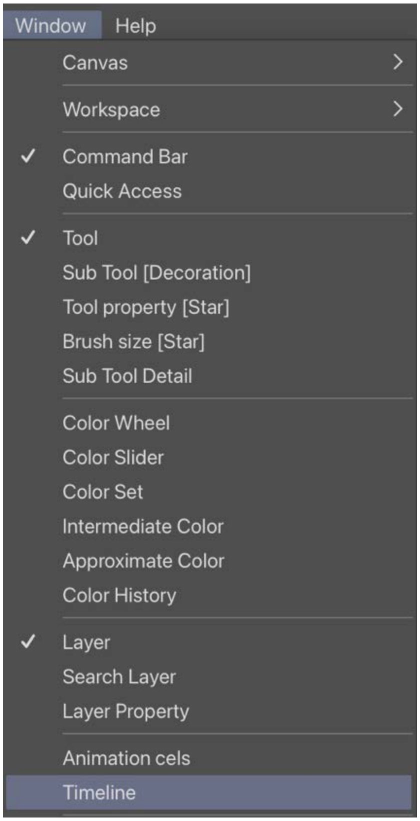


Figure 18.17 – Screenshot of the Window drop-down menu

11. Now you have a blank **Timeline** palette. In the **Timeline** palette, click on the **New timeline** icon, which is circled in the following screenshot, to open the **New timeline** dialog box:

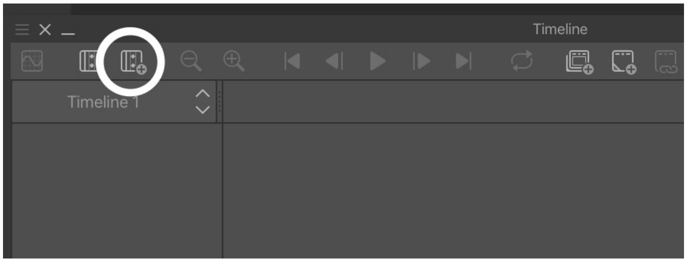


Figure 18.18 – Screenshot of the Timeline palette

12. In the following screenshot of the **New timeline** dialog box, set **Frame rate** to `8` and **Playback time** to `8`, then click **OK**:

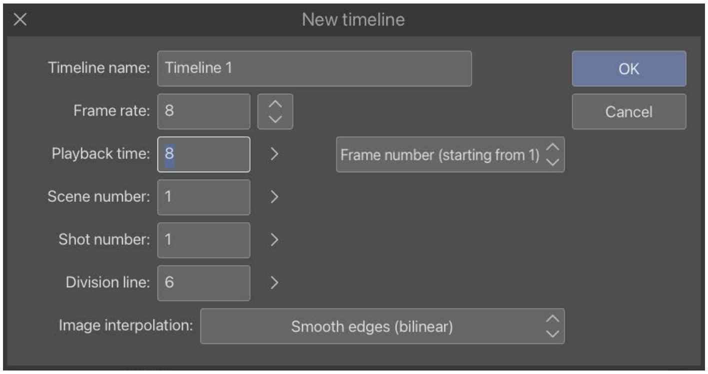


Figure 18.19 – Screenshot of the New timeline dialog box

13. The following screenshot is your current **Timeline** palette, with a timeline named **1**. Right-click the first frame, which is the area highlighted in red, to bring up a right-click menu:

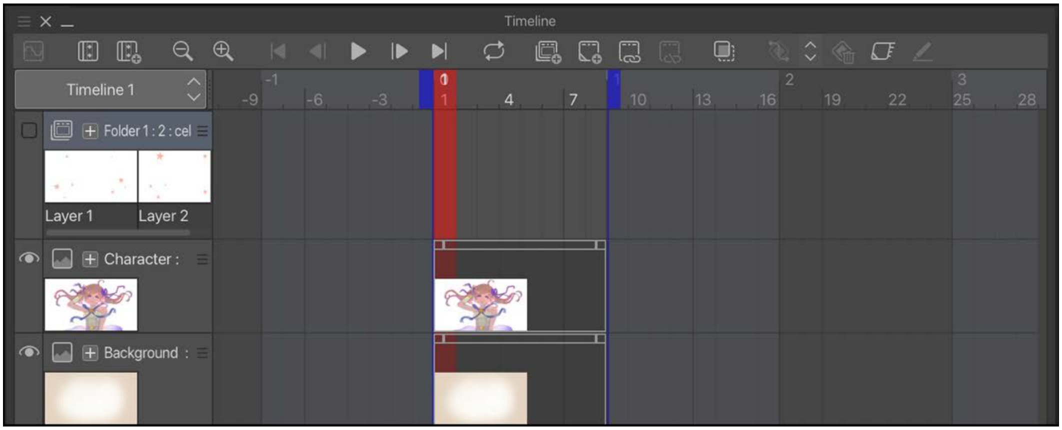


Figure 18.20 – Screenshot of the Timeline palette

14. Select **Layer 1** from the menu in the following screenshot to insert the image into a target frame in **Timeline 1**:

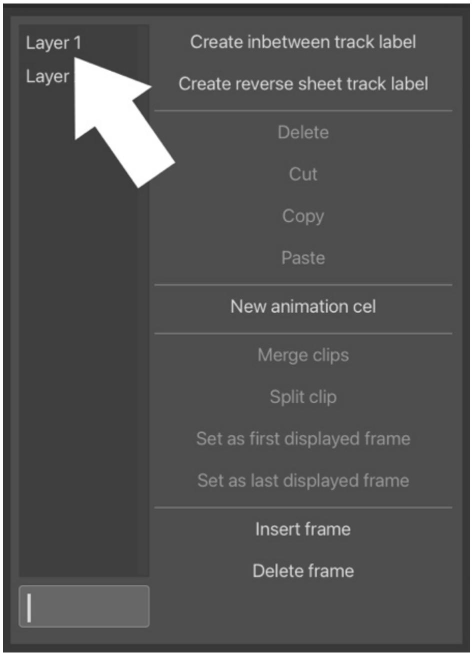


Figure 18.21 – Screenshot of the right-click menu

15. Right-click on frame **4** of **Timeline 1**, and select **Layer 2** from the right-click menu, then you will see a result that looks like the following screenshot:

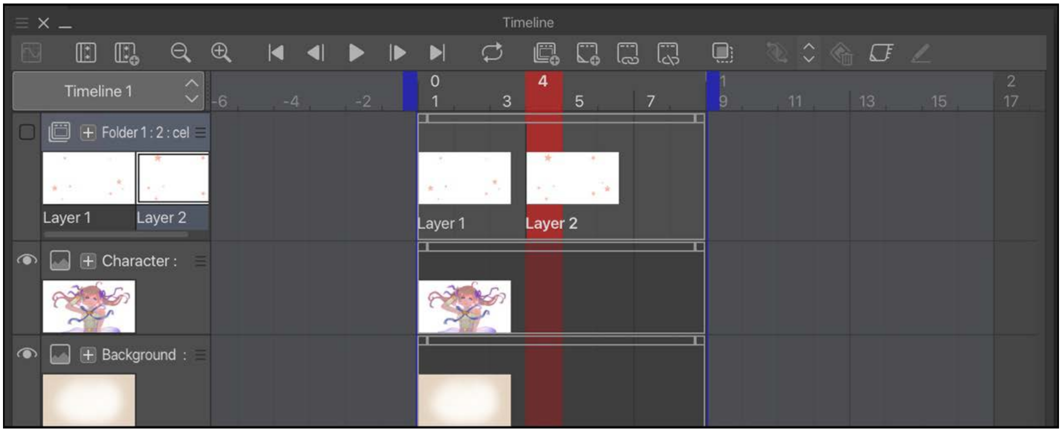


Figure 18.22 – Screenshot of the Timeline palette with an eight-frame animation

16. Your animation is now complete! Click the checkbox next to **Folder 1** to make it visible again.
17. To play the animation, click the triangular **Play/Stop** icon on the **Timeline** palette. You can also play it in a loop by clicking the **Play in loop** icon, which is circled in the following screenshot:

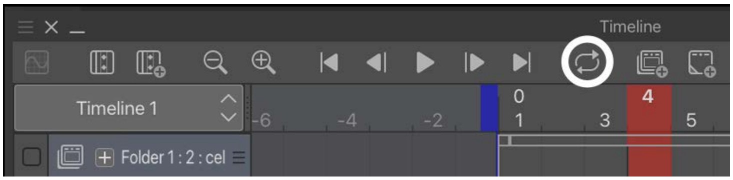


Figure 18.23 – Screenshot of the Timeline palette

When the animation is played in a loop, it gives the illusion of the stars around the character dancing around by changing their sizes and angles as in the following screenshot of the frames:

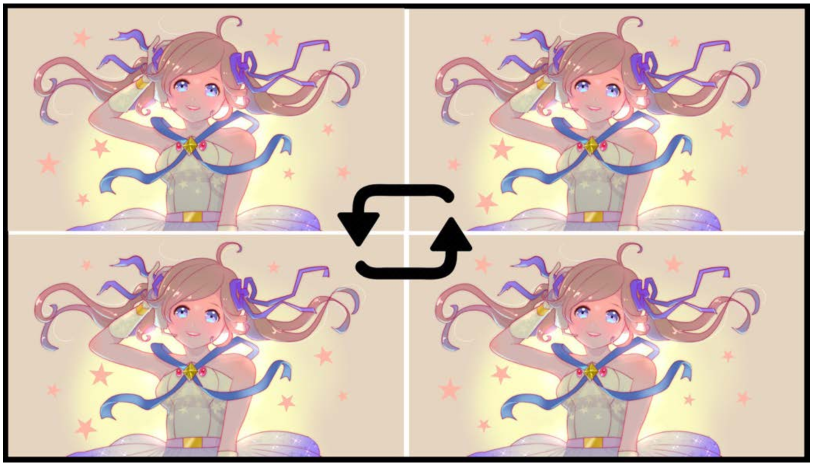


Figure 18.24 – Screenshot of the frames of animation

Isn't it great to see your art now has some motion? Before we find out how to export the animation, let's learn just one more way of creating an animation.

Creating an animation using one image with the Camera Movement feature

There are animations that you can create by moving the camera position rather than the characters. We need to add something called keyframes, which indicate from which timepoint to start adding an effect such as camera movement, and the timepoint for it to end. Follow these steps to create an animation using the Camera Movement feature:

1. First of all, create a canvas of 1280 x 720 px with 144 dpi, with your artwork with character and background drawings in separate layers as in the following screenshot:

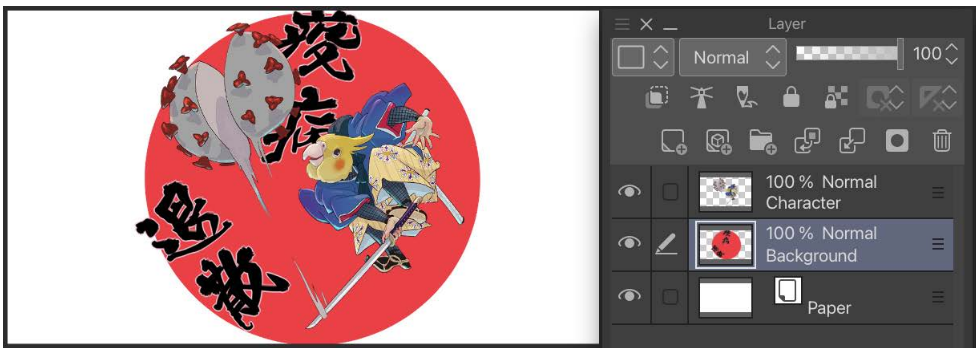


Figure 18.25 – Screenshot of artwork and the Layer palette

2. Click **Window** from the **File** menu and click on **Timeline** from the drop-down menu to open the **Timeline** palette.
3. On the **Timeline** palette, click on the **New timeline** icon, which is circled in the following screenshot, to open the **New timeline** dialog box:

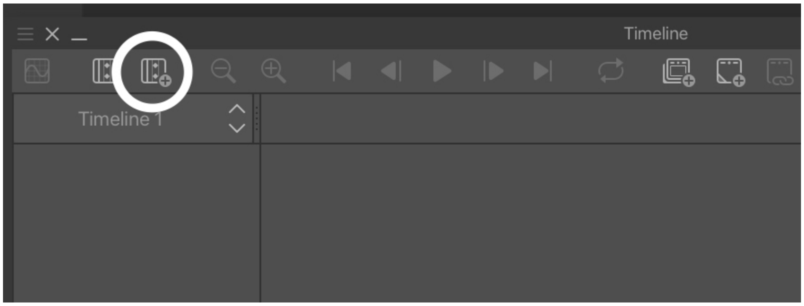


Figure 18.26 – Screenshot of the Timeline palette

4. In the following screenshot of the **New timeline** dialog box, set **Frame rate** to `8` and **Playback time** to `8`, then click **OK**:

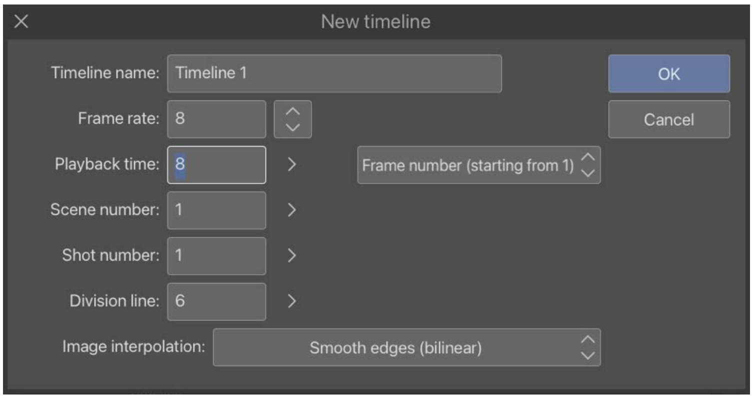


Figure 18.27 – Screenshot of the New timeline dialog box

5. On the **Timeline** palette, click the **Enable keyframes on this layer** icon, which is circled in the following screenshot:



Figure 18.28 – Screenshot of the Timeline palette

6. Click the first frame, which is highlighted in red in the following screenshot:

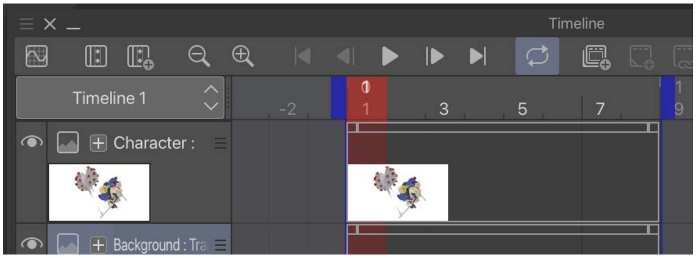


Figure 18.29 – Screenshot of the Timeline palette 2

7. Click the **Operation** tool on the **Tool** palette, then select the **Object** sub tool. You will then see a square with a handle on the canvas, as in the following screenshot:

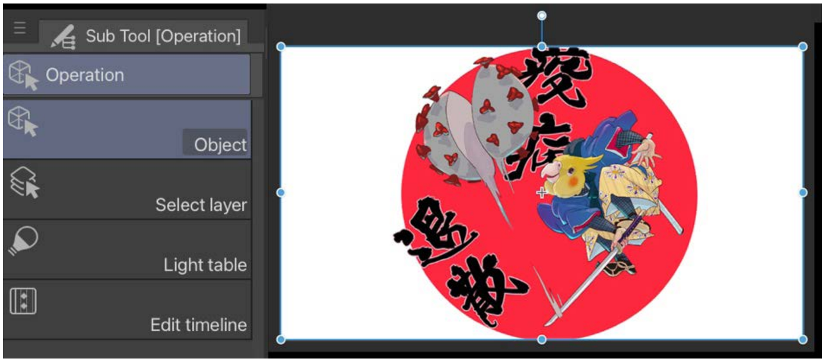


Figure 18.30 – Screenshot of the Sub Tool palette and canvas

8. Click and drag to rotate with the top control point and change the scale with the handles at the corners. When you transform a layer (make sure the layer you want to move is selected on the **Layer** palette), a keyframe is created in the first frame on the **Timeline** palette, which is a diamond-shaped mark as in the following screenshot:

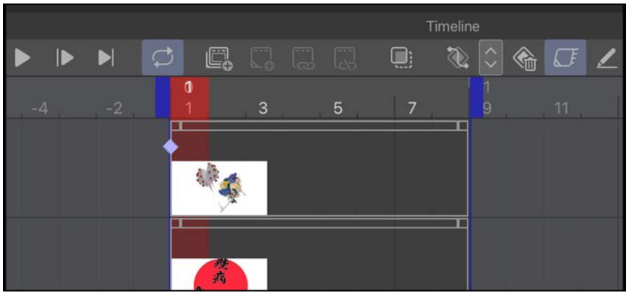


Figure 18.31 – Screenshot of the Timeline palette

9. Click the fifth frame on the **Timeline** palette and transform the artwork to your desired scale on the canvas using the **Object** sub tool. When you transform it, a keyframe is created on the **Timeline** palette. The diamond-shaped keyframe mark can be clicked and dragged to move it to other frames. Now you can see two diamond-shaped keyframe marks in the following screenshot:

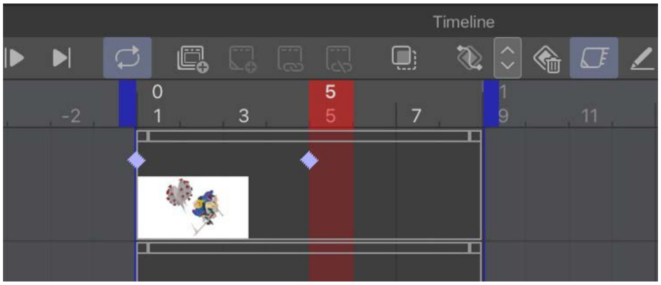


Figure 18.32 – Screenshot of the Timeline palette with keyframes

10. Click the keyframe mark you added in the first time, then right-click and select **Copy** from the menu.
11. Select the final **eighth** frame on the timeline, right-click to bring up the menu, and select **Paste**. The keyframe is now pasted on the eighth frame. We can also transform the art on the canvas in the same way as we did the first time:

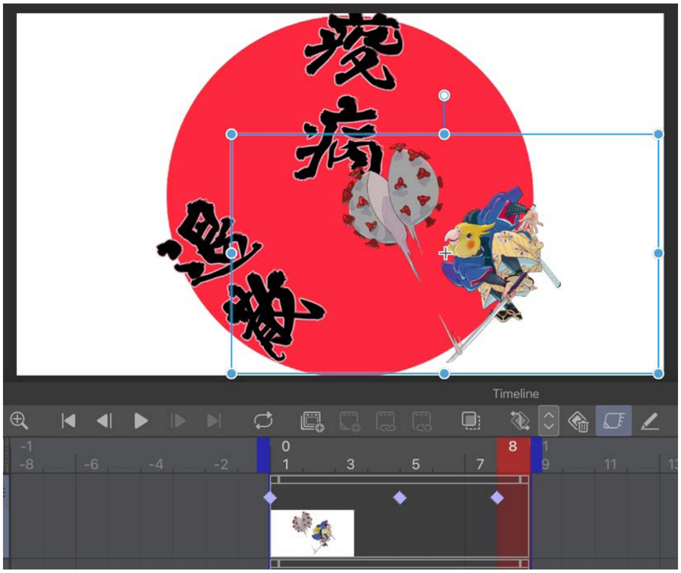


Figure 18.33 – Screenshot of the Timeline palette with keyframes

You have finished creating an animation using the camera movement feature! Let's check that it really works by clicking the **Play** icon.

When the animation is played in a loop, it shows the characters growing bigger and then smaller as if they are about to pop out from the background, as in the following screenshot of the frames:

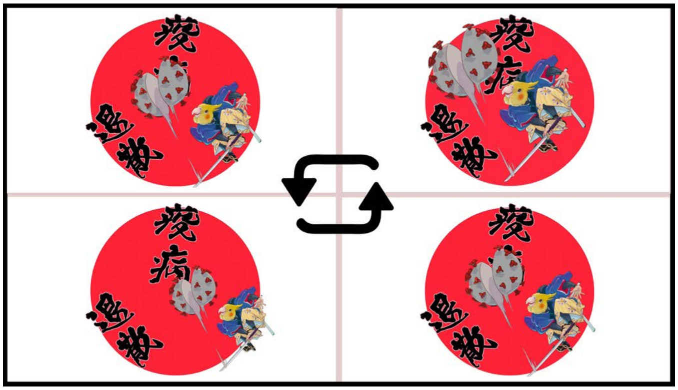


Figure 18.34 – Screenshot of the frames of the animation

> **Tip**
> You can create animation images in one folder, but when doing more complex animation, such as characters moving and interacting with one another, you may have more success by roughing out the animation in one animation folder and then refining the motion in another folder. This way, the original sketches are preserved, and you can adjust anything as needed. This is similar to traditional animation, roughing out the motion in pencil sketches and then painting the finished animation onto transparent celluloids.

You have now created two types of animation: one using one art image and drawing elements you want to move in new layers; the other using the camera movement feature by adding keyframes.

It's time to export those animations to share them with others – read on to find out how.

Exporting animations

Just like when we exported our still images, we can export our animations too. This is a simple process, but there are several formats to export that we need to explore in order to know which is the correct one to choose for our purposes.

In this section, we are going to have a look at each method of exporting animations.

In the **File** menu, you will see the **Export animation** option, and under that option are the different ways we can export animations. These are shown in the following screenshot:

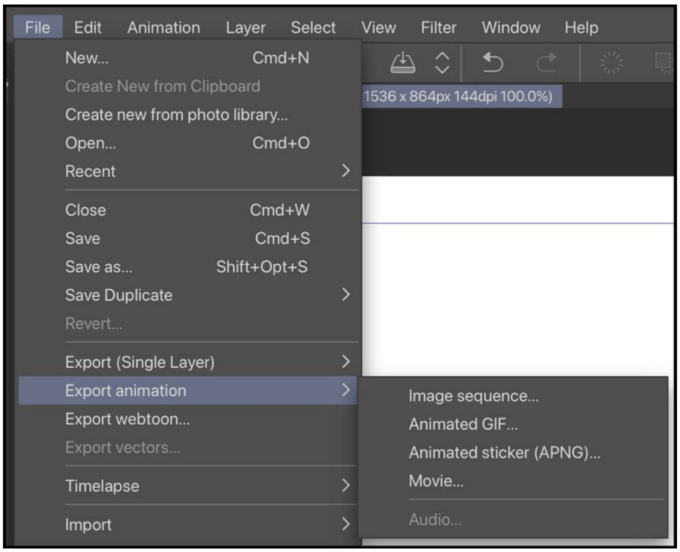


Figure 18.35 – Screenshot of the Export animation options

We will discuss each of these options next.

Image sequences

An image sequence is a series of still images. Each animation image is exported as a numbered image that can then be imported into other software for further editing. The **Image sequence export settings** window is shown here:

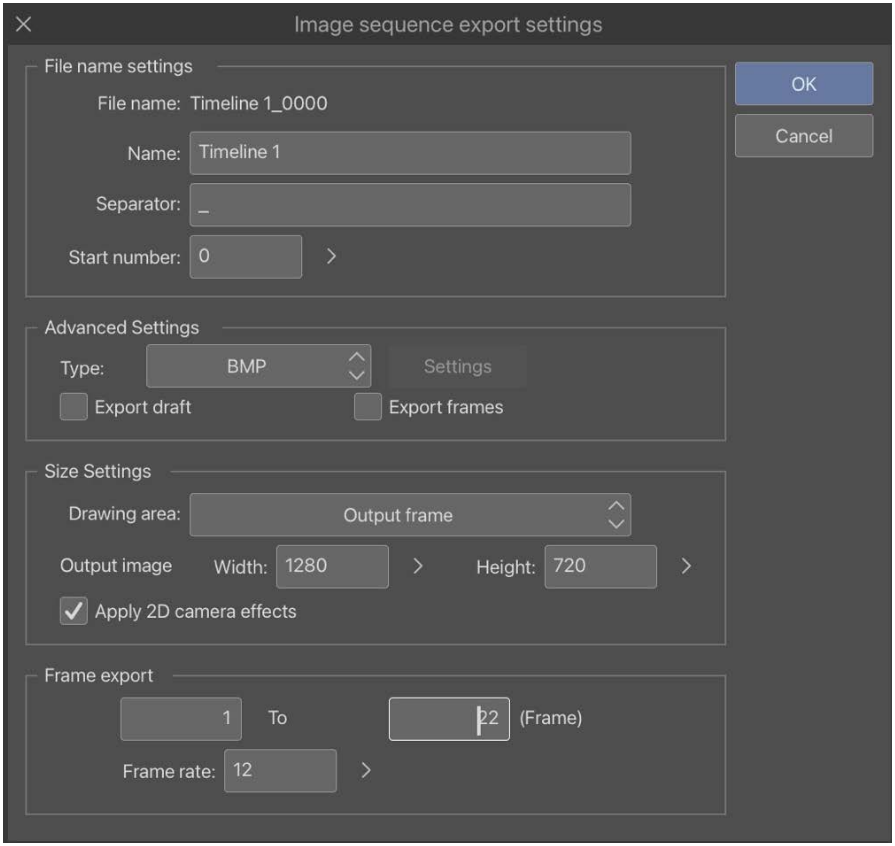


Figure 18.36 – Screenshot of the Image sequence export settings window

The text entered in the **Name** field will be the filename for each image. The character entered into the **Separator** field will separate the name from the numbers in the final filenames. By changing the entry for **Start number**, we can adjust what number our image sequence will begin with.

Under **Advanced Settings**, we can set the file format of the images from the drop-down menu. You are also given the choice of either exporting a draft image sequence or created frames by checking the corresponding boxes.

Size Settings can be used to select how big a **Drawing area** you want to export, from **Output frame**, **Overflow frame**, and **Entire canvas**. Also, to resize the exported image's **Width** and **Height**. You can also check the box **Apply 2D camera effects** if you created and want to export a camera movement with an image sequence.

The **Frame export** settings can be used to specify a section of frames to export, or all frames can be exported. The **Frame rate** option can be used to change the frame rate.

Read on to the next exporting option, animated GIFs.

Animated GIFs

An animated GIF is one of the most common ways to share animation on the internet. You've undoubtedly seen animated GIFs on countless websites and social media posts as internet memes. To export your animation as a GIF, select the **Animated GIF…** option from the **Export animation** menu option.

First, name the file to be saved. Then, the **Animated GIF export settings** will appear, as shown here:

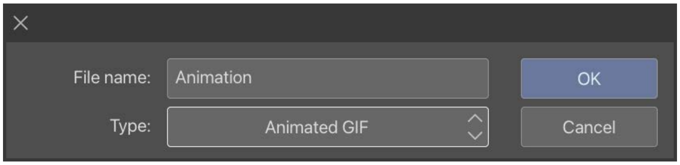


Figure 18.37 – Screenshot of the Animated GIF export dialog box

There is no other choice in the drop-down menu. Click on **OK** and the new window pops up for you to navigate to the location you want to export the animated GIF to. Mac and PC versions of Clip Studio Paint might skip the dialog box and go straight to the **Export location** dialog box.

Let's see the next exporting option, **Animated Sticker** (**APNG**)!

Animated stickers (APNG)

An animated sticker, or APNG, is an animated image with the qualities of a `.png` file instead of a `.gif` file, often used for animated stickers in messaging apps. The APNG export options are shown in the following screenshot:

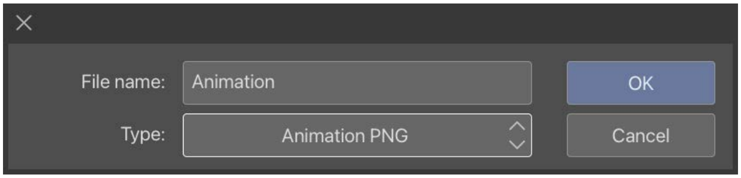


Figure 18.38 – Screenshot of the Animated Sticker (APNG) export dialog box

These options are the same as the `.gif` options; there are no other options on the drop-down menu. Again, this dialog box might be skipped on the Mac and PC versions of Clip Studio Paint and you might see the **Export location** dialog box straightaway.

Let's look at the last exporting option, **Movie…**.

Movie files

Movie files can be uploaded to YouTube or imported into video editing software to add sound or other effects. When you select the **Movie…** option, you will be prompted to add a file name and select a file type as in the following screenshot:

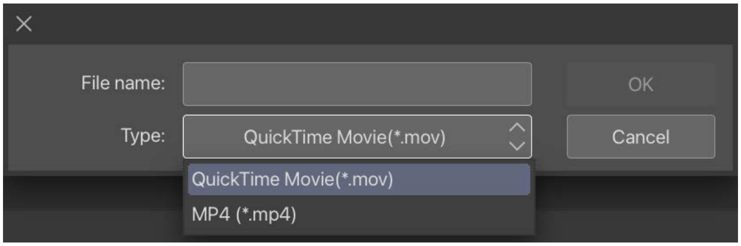


Figure 18.39 – Screenshot of the Movie export dialog box

As a point of interest, the MP4 file type is much lighter and is used more widely on platforms than the QuickTime Movie file type, but QuickTime Movie beats MP4 for image and audio quality. Once you add a file name and select the file type, then click **OK**, the following window will appear:

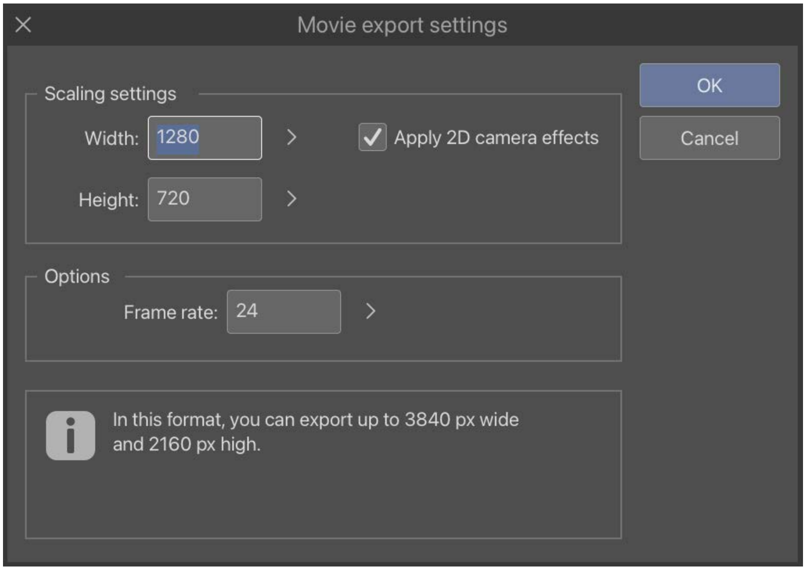


Figure 18.40 – Screenshot of the Movie export settings window

At the top of the window, we have **Scaling settings**. By using the **Width** and **Height** settings, we can resize the dimensions of our final file. If you check the box labeled **Apply 2D camera effects**, a camera movement you have created will be exported too.

The **Frame rate** option controls the frame rate of playback.

Now you know how to use Clip Studio Assets and quick ways to start creating animations and then export them from Clip Studio Paint!

Summary

In this chapter, we started by getting to know what Clip Studio Assets is, and how to register to log in to start using it. We moved on to learn ways to search for your desired materials, then download them, and finally register a brush material. Then we had a quick look at how to bring life to our illustrations with animation using two different methods, and different ways to export them for different uses. Now you can download and use new assets, and create and export animations for GIFs, stickers, and YouTube movies!

In the next chapter, we are going to learn how to export, print, and upload your manga. You can get a better idea of what a finished manga will look like, and also a deeper understanding of how to set up pages as seen in *Chapter 3*, *Pages and Panels to Shape Manga*, if you read it again. We will discuss the many ways we can export our work for display on the web and in print. With physical manga books or webtoons, you will see the many possibilities for how to present your creations.

19
Exporting, Printing, and Uploading Your Manga

Now that we have our comics or illustrations sketched, inked, and colored, it's time to get them out of Clip Studio Paint and to the print shop or onto our social media or website. This chapter will teach you about the exporting option in the software, including how to resize pages and adjust the resolution during exporting.

We will start this chapter by learning how to make your manga file ready for home-made printing by adjusting the print settings and move on to render a file in a printer shops-friendly format, learning the uniqueness of each file format. We will look closely at how to adjust image quality, file size, and how to resize the final image. Finally, we will learn how to export manga files for web uploads with an additional two useful EX version-only functions.

The following topics will be covered in this chapter:

- Printing at home
- Exporting for print
- Adjusting image quality and file size
- Resizing an image while exporting
- Exporting for a web display
- Exporting webtoons (EX only)
- Exporting batches of pages (EX only)
- Exporting to Clip Studio SHARE

By the end of this chapter, you will be able to understand how to handle your manga in terms of publishing both on the internet and in physically bound manga books. This will give you a great idea of what your manga will finally look like, so that when you create a new manga, you can have the best choice in terms of canvas size and resolution!

Let's get ready to share our work with the world!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device, and in order to create at least three pages of manga, I recommend creating an A5 portrait canvas in 300 dpi per page to go through the content in this chapter.

Printing at home

It takes a great amount of work in terms of getting ready to print, and then to do the actual printing and bind everything together by yourself, but the artwork will give you a wonderful crafty feeling! In this section, we are going to learn how to make your manga creation ready for home printing.

Over the past few years, home printers have become more affordable and more powerful. Just a decade ago, most home printers were only able to produce decent prints from digital photographs. Now, we have home printers that can print beautiful, high-quality images without breaking the bank. Some printers are even "artist-grade" now and can print in wide formats, on fabric, and more.

There are so many home printers now that we obviously can't give a rundown of all of them in this book. It is best to do your own research before buying a printer and think about how you will use the printer. If you are mainly doing black and white prints, you can probably get away with a slightly less expensive printer, or even a laser printer that uses toner instead of ink cartridges. If you are going to print lots of large prints, you may want to consider getting a wide format printer. Printers can be set up with continuous ink systems to save on color ink costs for those who print lots of high-quality photographs or paintings. Read reviews online and compare the features of different printers before purchasing one. I recommend Canon or Epson printers for their fantastic art printing results! My favorite is the Canon PIXMA series for its quality and color expression.

Tip

If you do a lot of printing at home, make sure that you keep ink cartridges handy. Ink always runs out at the most inconvenient times! And it's always safer to buy genuine cartridges, instead of compatible cheaper ones, because this extends your printer's life.

You will also want some high-quality paper. I like photo paper, cardstock, or presentation paper for my art prints, but thinner papers will work as well. Make sure that you don't go too thin, however, because if we saturate a thin piece of paper with lots of ink, it will become wrinkled and warped, and the back of the page will be see-through!

Most inkjet printers will print fine from a file that is set up in RGB color mode, so when we have finished creating our manga, we don't need to convert our Clip Studio file at all in order to print from it. Ensure that your printer drivers are up to date, as this will solve most printer problems.

Follow these steps to print an image from Clip Studio Paint:

1. Open the file that you wish to print in Clip Studio Paint. Whether it's a color or a black and white file is up to you.

2. In the **File** menu, click on **File | Print settings** to review the **print settings** dialog box. The **Print Settings** dialog box is shown here:

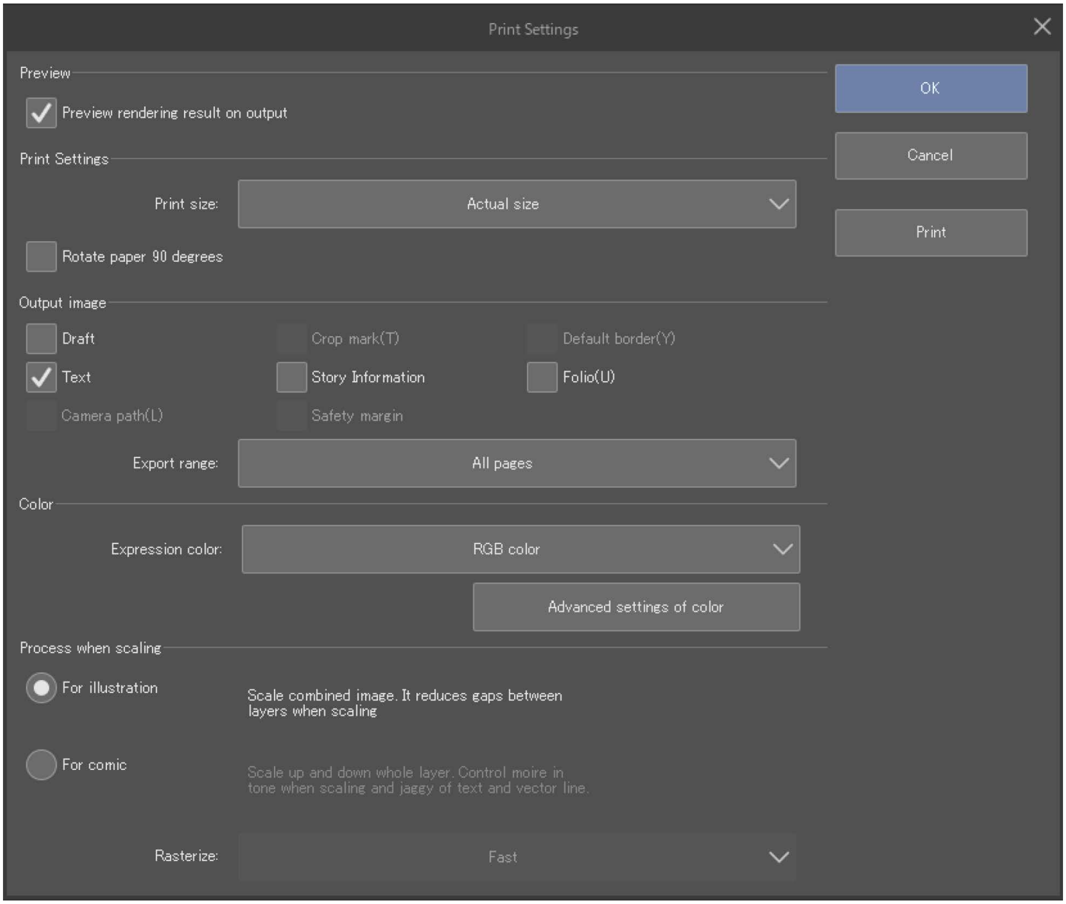


Figure 19.1 – Screenshot of the Print Settings dialog box

3. Under **Preview**, check the box next to **Preview rendering result on output**. This option allows us to see what our page will look like before the print begins and will allow us to stop the printing process if something is wrong.

4. Choose the correct **Print size** settings from the drop-down menu.

We will now examine the remainder of the options in the **Print Settings** dialog box:

- **Print Settings**: Most print jobs should be able to use the **Actual size** or **Scale according to paper size** options. The **Actual size** setting prints according to the size the file is set up as. The **Scale according to paper size** option will resize the print contents to the size of the paper in the printer, as the following printing examples demonstrate:

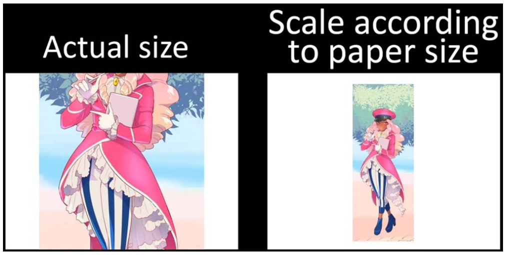


Figure 19.2 – Screenshot of the Actual size and Scale according to paper size option results

- **Output image**: This option give us the chance to print or not print some parts of our image. Usually, any layers set as a **Draft** layer will not print or export, but we can choose to print draft layers by checking the box next to **Draft**. We can also choose to print or not print text, story information, and more. Under **Export range** are the options to print **All pages**, **To offset of crop mark**, or **To inside of crop mark**. If we have artwork that extends outside of any crop marks (the bleed area of the art), but we want it to be printed, we should select the **All pages** option. The other two options will stop the printing at the crop marks or inside of the crop marks. The results of the various options are indicated in the following screenshot:

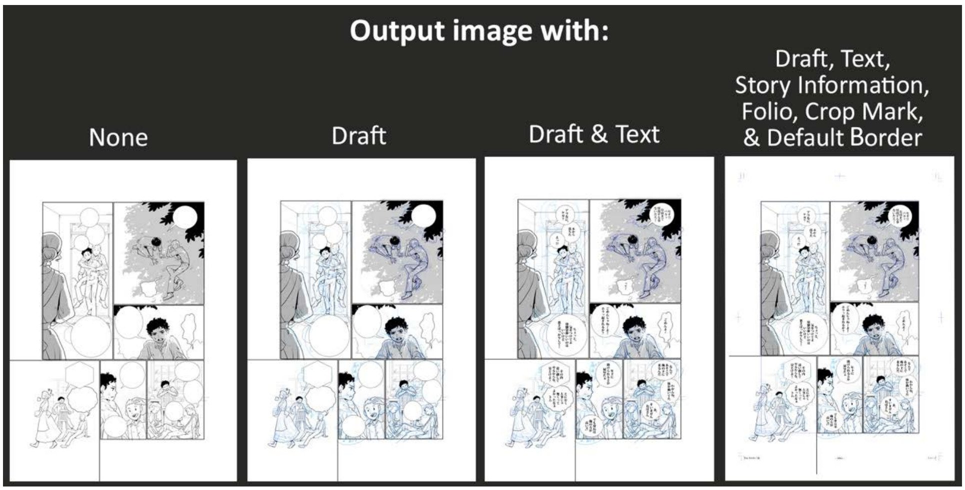


Figure 19.3 – Screenshot of the Output image option results

- **Color**: Under the **Expression color** settings, we have another drop-down menu with several options. The first one is **Auto detect appropriate color depth**, which allows Clip Studio Paint to automatically set the color depth depending on the file being printed. There are two **Duotone** options, one called **Threshold** and one called **Toning**. Both options print in pure black and white, with no gray tones. The **Threshold** option takes any gray or color tones and automatically converts them into black or white. The **Toning** option still prints in pure black and white with no gray, but it converts any gray or color areas into areas of black dots that mimic shading. The **Gray** option prints in grayscale, and the **RGB color** setting prints the image with the RGB values that the printer translates into its own ink colors. **CMYK color** prints the image with the CMYK values that most printing systems follow:

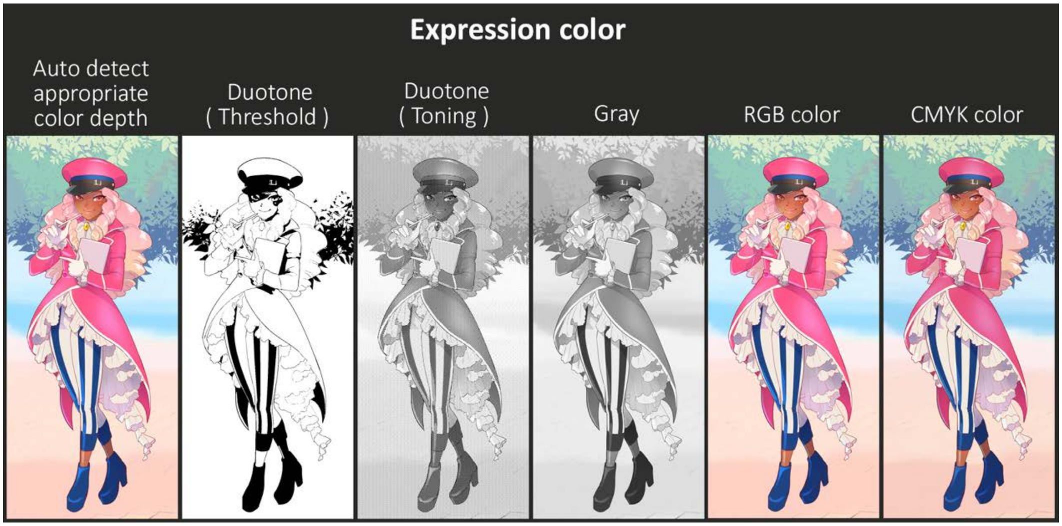


Figure 19.4 – Screenshot of the Expression color option results

Choose the expression color setting that best matches the image you are printing. The following screenshot shows all the color options:

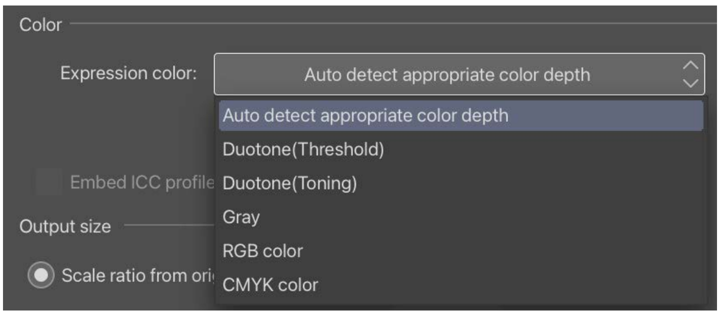


Figure 19.5 – Screenshot of the Expression color options

The **Advanced settings of color** options do not actually provide us with advanced color options, but instead options for printing out the crop marks and tones. Here is a screenshot of the **Advanced settings of color** dialog box:

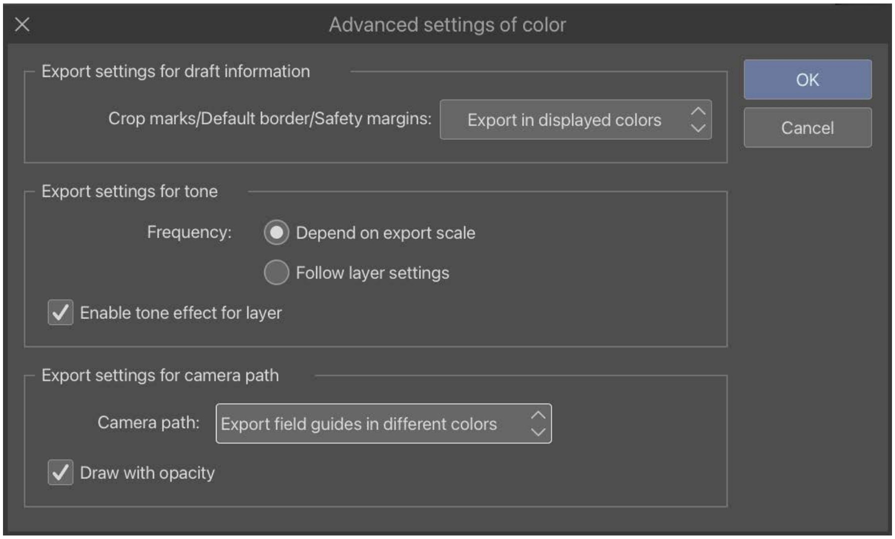


Figure 19.6 – Screenshot of the Advanced settings of color dialog box

In the **Crop marks/Default border/Safety margins** option, we can set it to **Export in displayed colors** (prints in the color that the borders are set to in the preferences). We can also **Export in black** and **Export in cyan**, which are both pretty self-explanatory!

Under the **Export settings for tone** settings, we can resize screentones depending on the scale of the print (**Depend on export scale**) or use the settings of the tones in the image itself (**Follow layer settings**). Depending on the scale of the printed image, this can be used to control any moiré patterns that may occur from the screentones.

We can ignore **Export settings for camera path** unless you recorded the camera path with keyframes in animation. If you are wondering what moiré is, have a look at the following screenshot, which shows an unintended pattern on the area where line patterns are overlapped, which sometimes occurs on prints where you used screentones:

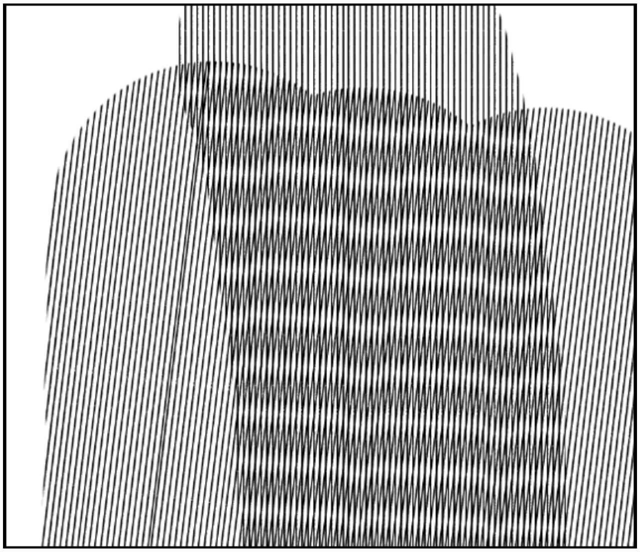


Figure 19.7 – Screenshot of an example of a moiré pattern

- **Process when scaling**: We can now go back to **Print Settings** to finish adjusting our options. The final print settings section, which is demonstrated in the following screenshot, is the **Process when scaling** options. These are **For illustration** and **For comic**. These settings change how the image is processed before it is printed. If we don't use lots of tones, then the **For illustration** settings are suitable for our needs. In the **For comic** setting, the tone layers are processed individually before printing so that they are scaled, meaning less of a chance of getting a moiré pattern:

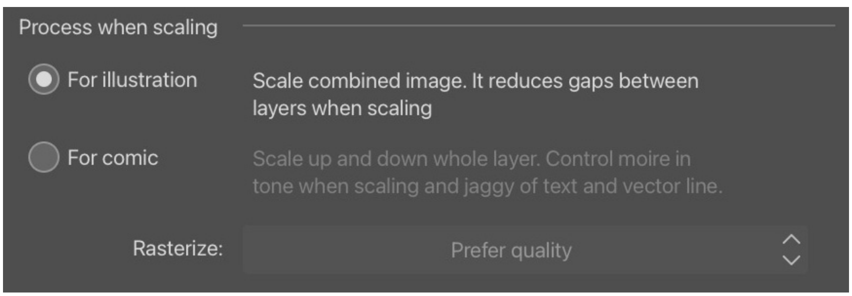


Figure 19.8 – Screenshot of the Process when scaling settings

Finally, we have a drop-down menu for our **Rasterize** settings. The **Fast** setting is fine if we are printing out a quick copy just to see how our text or layout looks. For a better print, use the **Prefer quality** setting.

5. To save the settings for later, click on the **OK** button.
6. To print now, click on the **Print** button. You will be asked to select your printer and any printer settings before seeing the print preview screen. If anything doesn't look right in the preview screen, cancel the print job, adjust the print settings, and then try again.
7. If you did not execute the print from the **Print Settings** window, you can click on **File | Print** to print the image when you are ready.

Even by only focusing on the printing options that Clip Studio Paint has, it's a lot to take in! Be sure to look at any printer-specific options that you may have to adjust, such as the print quality and the number of copies. You may have to adjust things a few times to get the best print from your home printer.

With most home printers, it's not economical to print out multiple copies of our comic to hand out or to sell. It may be perfect for small runs of color prints, but for any larger number of prints, we will want to export our images so that we can send them to a publisher or print shop. Let's find out how in the next section.

Exporting for print

Whether you're making comic books or making pin-up images to sell at a convention, you'll need to know how to print from Clip Studio Paint or how to export the images you create to send to your local print shop, an online printer, or publisher.

In this section, we are looking into how to prepare your manga file to be ready to send to a print shop or publisher.

> **Tip**
>
> Even if you are only planning on displaying your work on the internet, you should still think about setting up your file as though you are going to print it. Work in 300 dpi and set up your file dimensions to match whatever paper size you will end up printing on. Even if you are only thinking about the internet now, you may eventually want to start printing your art. Setting it up for print when you create it will save a lot of time, headaches, and redrawing later!

There is a big difference between sending our files to a professional offset printer or to a book publisher that handles small quantities of books on demand or sending them to the copy shop down the street. When sending your files out for printing, make sure that you research what file formats the printer accepts and whether or not they have any restrictions. When taking your files to a local chain office supply store or a copy shop, most file formats will do fine, so it's up to you how you want to format your images.

> **Tip**
> If and when possible, find a small, local print shop where you can do large amounts of printing. Not only do they usually have better prices, but they can often work with you on special projects. Also, the staff at these small stores tend to have more knowledge of their equipment and how to get the best quality prints for your art.

In this section, we are going to export high-quality, lossless versions of our images that will look good when printed and can be opened by anyone even if they don't have Clip Studio Paint. Follow these steps to export your images in a format suitable for print:

1. Open the image you wish to export.
2. In the **File** menu, click on **File** and then go down to the **Export (Single Layer)** option.
3. From the list of options under the **Export (Single Layer)** option, choose the file format in which to export the image and then click on it. File formats will be discussed after these steps.
4. Name your file and choose the location to save to in the window that appears.
5. Choose the parameters to be exported in the next window. It should look similar to the **psd export settings** window shown in the following screenshot. Some of these options should look familiar from **Print Settings** in the previous section:

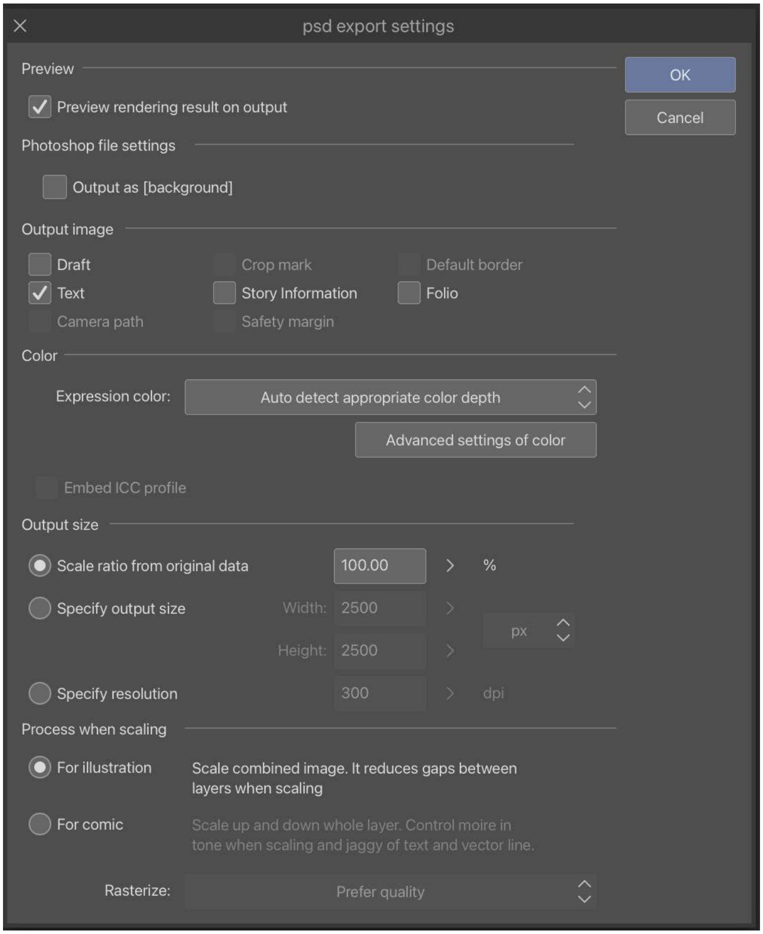


Figure 19.9 – Screenshot of the psd export settings dialog box

6. Click on **OK** to complete the export.

Here is a screenshot of the file format options available under the **Export** settings:

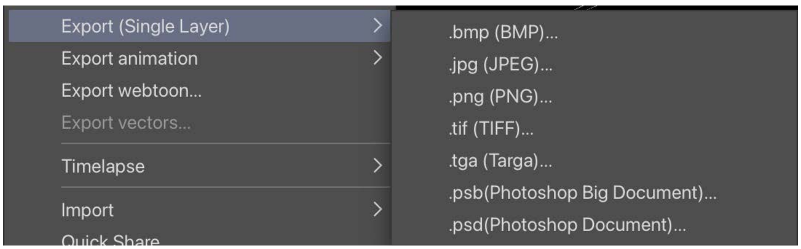


Figure 19.10 – Screenshot of the Export (Single Layer) options

The following list explains each of the file formats:

- `.bmp` (BMP): Bitmap image. Lossless format with no compression. Creates large file sizes.
- `.jpg` (JPEG): Widely used compressed image format. Suitable for web displays, but sometimes not suitable when printing images.
- `.png` (PNG): Portable Network Graphics. Lossless image format capable of preserving transparency in the final output and suitable for color or grayscale. Image file sizes are small, but maintain the original quality.
- `.tif` (TIFF): Lossless file format that can preserve layer information, transparency, and original quality. Not suitable for online displays, but good for storage or editing.
- `.tga` (TARGA): Truevision Advanced Raster Graphics Adapter. Bitmap image format not suitable for photographs or images with lots of gradients, but suitable for simple images such as icons, cartoons, and line art.
- `.psb` (Photoshop Big Document): Adobe Photoshop image format suitable for handling large images with lots of color depth, resolution, or large canvas size. Not suitable for web displays.
- `.psd` (Photoshop Document): Adobe Photoshop document format suitable for images that will be opened and edited further in Photoshop. Not suitable for web displays.

You don't have to memorize all the information pertaining to each file format, but just remember the most suitable ones for you, so next time you're exporting a manga file, you know exactly which one to choose.

You now know about size formats, but what about controlling the image quality and file size? Does this means that JPEG is a compressed image format and not suitable for printing? We will find that out in the next section.

Adjusting image quality and file size

There are times when you do not need to save a full-resolution image, such as when exporting for the internet or sending proof to a client. This section will explain how to export an image with compression so that the image quality and file size are decreased for easy handling. You will need an open file to export before starting the following steps:

1. In the **File** menu, go to **File | Export (Single Layer) – .jpg (JPEG)**.
2. Name the file and choose the folder to save it in. Click on **Save**.
3. The **JPEG export settings** dialog box will appear. Click on the checkbox next to **Preview rendering result on output** at the top of the window to enable this option.
4. Under **JPEG settings**, find the **Quality** setting. It is marked in the following screenshot:

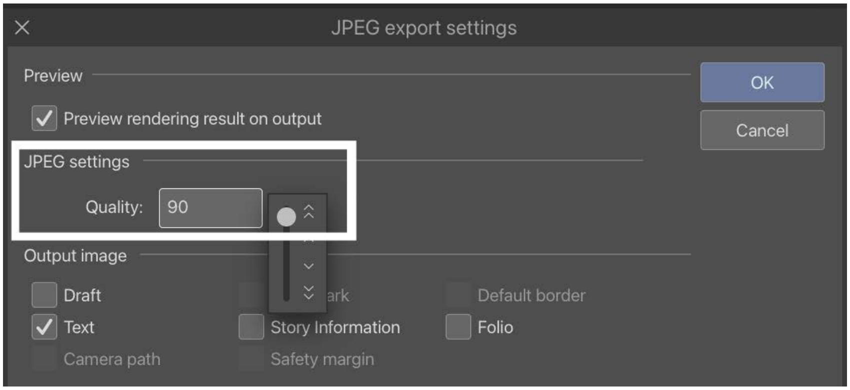


Figure 19.11 – Screenshot of JPEG export settings

5. Adjust the setting using the slider or arrows to change the compression of the file. The smaller the number, the more compressed the file will be. Compression sacrifices image quality to make the final file size smaller.
6. Click on **OK**.
7. The **Export preview** window will now appear. If needed, continue to adjust the quality using the setting in the bottom-right corner of the preview window.
8. Click on **OK** to complete the export.

The quality setting controls the amount of compression in the final file. Compression lowers image quality to make the overall file size smaller, making images load faster on the internet. In the following screenshot, the **Quality** option is set to `90`. Note the large file size at the bottom right of the window, at 601.97 KB:

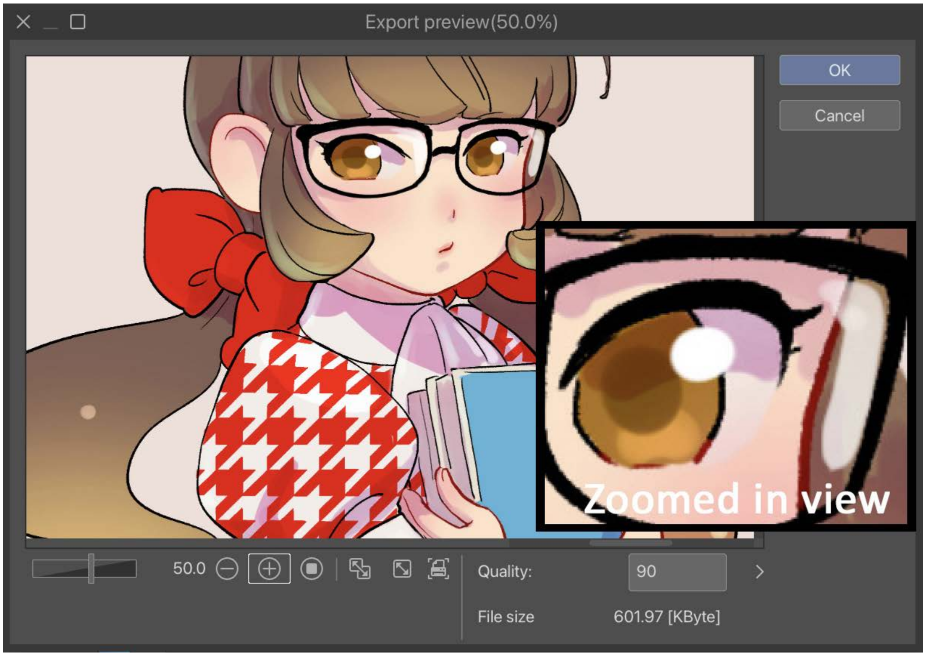


Figure 19.12 – Screenshot of Export preview with 90% quality

We can make the final file size smaller by adjusting the quality lower. By doing this, the quality of the image is reduced. Note how much the file size has gone down in the following screenshot, but also note how pixelated the image has become because of the low quality, especially around the gradients and the black lines:

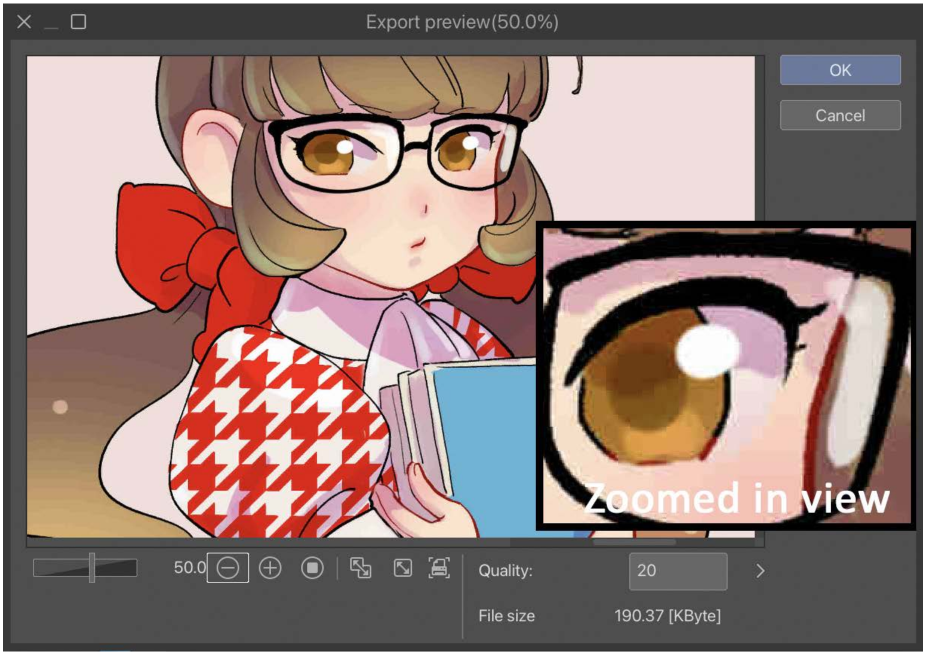


Figure 19.13 – Screenshot of Export preview with 20% quality

We reduced the image quality, so the file size is much lighter and easy to handle! This is perfect for an image that can be used for displaying as a thumbnail on the internet. And obviously, we cannot use it for printing because of the low quality of the image and pixelated noise in the image. I would recommend using `.jpg` image files only for internet use.

> **Important note**
>
> The image quality can only be adjusted when exporting to `.jpg` file format. Other formats are lossless and cannot be compressed.

Now you know how to adjust the quality of the image, and what will happen if you reduce the image quality to a lower resolution. However, `.jpg` is the only format for adjusting quality; the other file formats can be resized while maintaining file quality. We can export files to match the size in terms of percentage, width, or resolution, which is covered in the next section.

Resizing an image while exporting

Another way of changing the file size of the exported image is by changing the width and height of the image during the process. This can be done on the fly without making any changes to your original file, ensuring that you'll never accidentally save a 600 pixel-wide version over your original drawing ever again.

You will need an open file to export in order to complete the following steps:

1. In the **File** menu, go to **Export (Single Layer)** and choose the desired file format for the new file. For this example, we will be using the `.png` file format.
2. Name the file and choose a folder on your computer to save it. Click on **Save**. The export settings for the file format you chose in *step 1* will appear.
3. Locate the **Output size** options. They are marked in this screenshot:

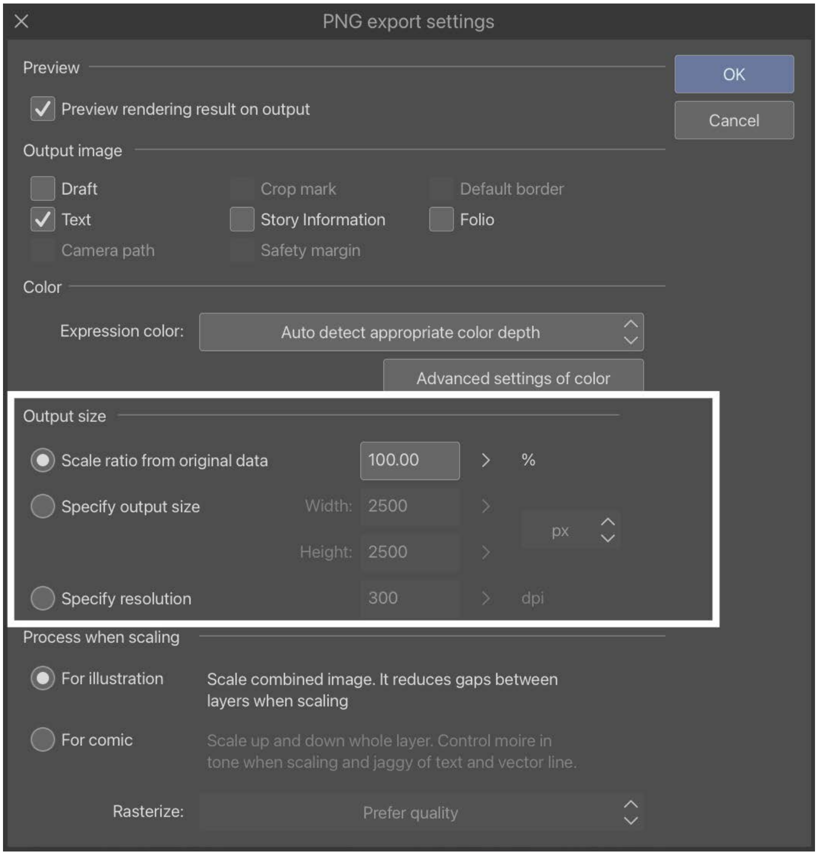


Figure 19.14 – Screenshot of the PNG export settings dialog box

4. Select the ratio button next to **Scale ratio from original data** to scale the image by percentage. In the following screenshot, the scale ratio has been set to `50.00`%. Note that **Width** and **Height** change as the ratio changes:



Figure 19.15 – Screenshot of the Output size options

5. Select the ratio button next to **Specify output size** to enter an exact **Width** or **Height** measurement. You can change the measurement scale from the drop-down menu to **cm**, **mm**, **in**, **px**, and **pt**. In the following screenshot, we entered a width of `800` in **px**. **Height** changes automatically when we enter a new **Width** measurement:



Figure 19.16 – Screenshot of the Output size options (2)

6. Click on **OK** to complete the export.

Great! Now we know how to change the export image quality and size. Let's see what we need to do specifically when you upload images to the internet in the next section.

Exporting for a web display

In addition to getting your work printed, one of the best ways to get known as an artist is to post your work on the internet. Whether you have your own website, an account on a host, or are posting to social media, the web is a great way to connect with other artists and to share your art and stories with the entire world.

Let's export a comic page with internet-friendly settings. You will need an image open to export. It can be of any width and height, and any resolution. We will be adjusting these parameters as we complete the export process.

Follow these steps to complete this process:

1. Execute the **Export (Single Layer)** command as detailed in the previous sections of this chapter and choose a format that is friendly for web display. **JPEG** is recommended because of its small file sizes and ability to control the compression, and most social media platforms accept it.
2. Name your file and choose a folder to save it in on your computer. Click on **Save**.
3. In the **export settings** window that then appears, ensure that the **Preview rendering result on output** option is checked.
4. If you are using the `.jpg` format, adjust the **Quality** option as explained in the previous section. In this screenshot, we have set the **Quality** option to `70`:



Figure 19.17 – Screenshot of the JPEG Quality option

5. Adjust the **Output size** options to dimensions that are web-friendly. Usually, this is `1000` pixels or less in width, but this might change depending on the format of your image or the website that the image will be uploaded to. For example, a horizontal comic strip may need to be wider than this to be legible. In the following screenshot, we have used the **Specify output size** option to set the image width to `1000` pixels:



Figure 19.18 – Screenshot of the JPEG Output size options

6. At the bottom of the **export settings** dialog box, we have the **Process when scaling** options. If you are exporting a colored image or an image that doesn't use screentones, select the **For illustration** option. If the export image is a comic with screen tones, choose the **For comic** option instead to cut down on the amount of moiré pattern in the exported image.
7. Click on **OK**.

   The **Export preview** window will be displayed once the image has been rendered. Use this preview to review the dimensions and the quality of the final exported file. Make any changes to the file quality by using the option in the bottom-right corner of the preview window. This allows us to change the compression before the final export so that we can ensure that we have a good-looking image with a reasonable file size. In the following screenshot, we adjusted the quality from the initial `70` to `80` to achieve a better image quality while keeping the file size small:

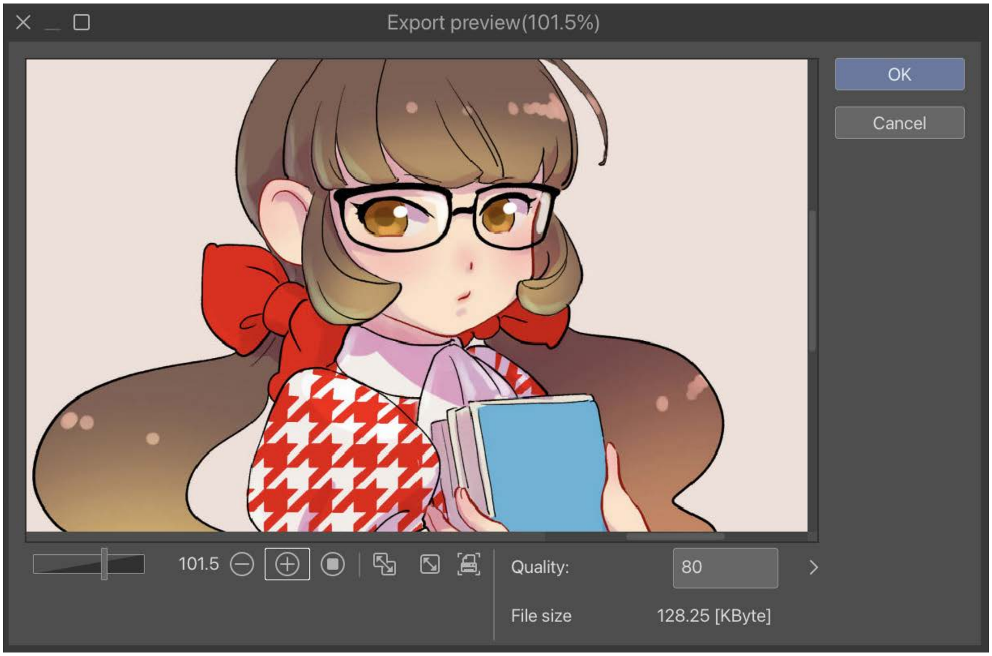


Figure 19.19 – Screenshot of the Export preview window

8. Click on **OK** to complete the export.

Done! You are now ready to upload your creation to the internet!

For people who already have or are thinking of switching to Clip Studio Paint EX version, which is more expensive and has more functions for expert use than the Pro version, I'd like to tell you that there is a very useful function for creating webtoons. Webtoons are becoming a bigger phenomenon nowadays in scroll-reading style manga and comic websites. Read on to find out how to export a file as a webtoon.

Exporting webtoons (EX only)

Webtoon is a spindle belt-shaped manga or comic, just like a film reel, for readers to scroll through to read the manga or comic. You can create a very long webtoon, which readers can scroll through and read to enjoy without clicking to see the next page. It works wonderfully for a platform such as Twitter, where only a limited number of images can be attached to one post.

The following screenshot shows a style difference between an analog story manga and a webtoon:

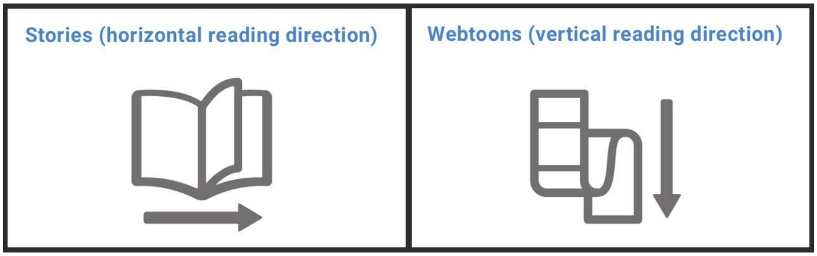


Figure 19.20 – Screenshot of the style difference

However, if it's getting too long, it also becomes difficult to handle. You can't check the contents in thumbnails, and it is not easy to jump to a specific spot to edit. The best way is to create a B5 size manga page and then put a few pages together to make a belt shape.

In this section, we will learn how to export files as webtoons easily with the help of Clip Studio Paint EX.

You can do this by following these steps:

1. Create a manga that contains more than two pages.
2. In the **File** menu, select **Export webtoon…** to bring up an **Export webtoon** dialog box, which looks like the following screenshot:

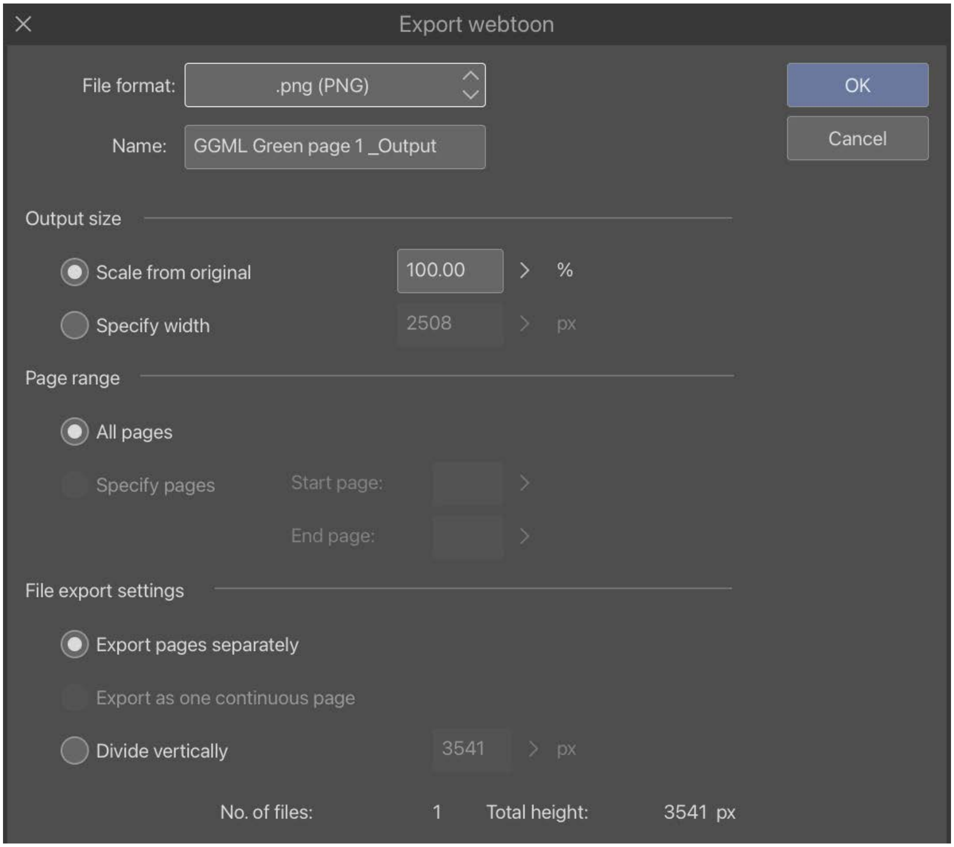


Figure 19.21 – Screenshot of the Export webtoon dialog box

3. There are selections for exporting file formats, which are **.png (PNG) or .jpg (JPEG)**, from the **File format** drop-down menu. Select **.jpg (JPEG)** for a safe option because it's widely used on most websites and social media platforms. Also, change the name of the exporting file to something of your choosing.
4. In the **Output size** settings, you can scale up or down by changing the number for the percentage. You can also choose **Specify width** by typing the desired width in pixels. This is very useful for some social media platforms or websites where they limit the width of the image to upload.
5. In the **Page range** settings, you can choose what page to export. Selecting **All pages** exports all pages, and by selecting **Specify pages**, you can type the start and end page numbers.

6. In **File export** settings, selecting **Export pages separately** exports pages as individual images. Selecting **Export as one continuous page** exports one image in which all the selected pages are connected vertically like a film reel. By selecting **Divide vertically**, you can also divide pages into two vertically at the point or length of the pixel you typed. At the bottom of the dialog box, you can see the number of files and the total height in pixels.
7. Once you have finalized all the settings, click **OK** to export. Please be patient; it may take few minutes to complete.

You have now mastered how to create a webtoon for sharing it on your social media or website!

Now we are going to look at another great function that Clip Studio EX possesses, which is exporting pages as a batch, meaning you don't need to resize or change the image quality one by one! What a time saver! Read on to find out how to do this.

Exporting batches of pages (EX only)

In this section, we are going to learn how to export manga pages as a batch.

There is no need to export your entire manga one page at a time so long as you have Clip Studio Paint EX. Because we can create story files in the EX version of the software, we can also export all or part of those story files all at once. They can even all be resized and compressed at the same time too, thereby saving you lots of time and effort in finishing up a project.

Follow these steps to export an entire chapter worth of pages at once:

1. In the **File** menu, go to **Export (multiple pages)** and then click on **Batch export…**. This menu is shown in the following screenshot:

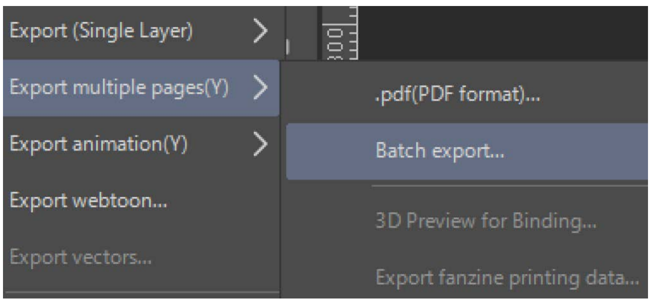


Figure 19.22 – Screenshot of the Export multiple pages option

2. The **Batch export** dialog box will appear, as shown in the following screenshot:

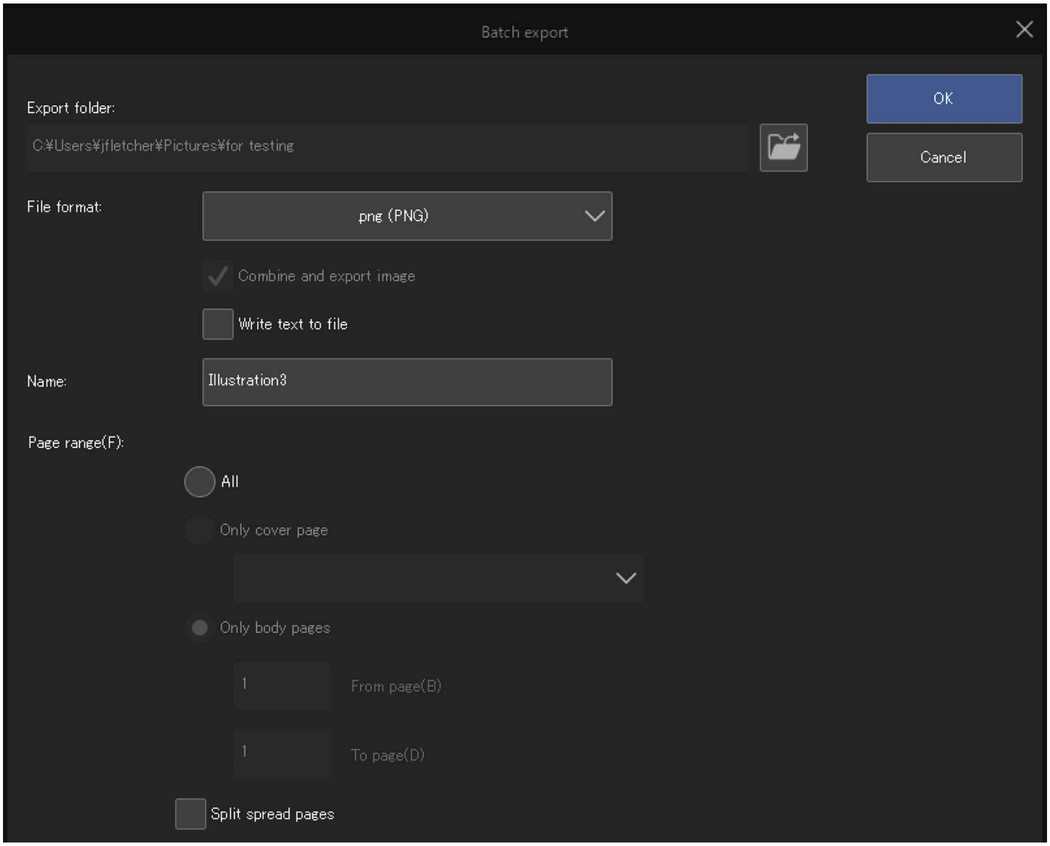


Figure 19.23 – Screenshot of the Batch export dialog box

3. Using the **Refer...** button, choose a folder in which to save the exported images. The chosen folder path will show in the **Export folder** box.
4. Use the drop-down menu to choose the file format for the exported images.
5. If desired, click on the box next to **Write text to file** to make a file of the text used in the story file.
6. In the **Name** box, type a name that will be the beginning of the filename for each exported image.
7. Select **Page range**. The **All** option will export all images in the story file. The **Only cover page** option will allow us to export just the front cover, just the back cover, or all cover pages. The **Only body pages** option allows us to select a range of interior pages to export.

8. To export each page of a two-page spread as a separate image, check the box next to **Split spread pages**.
9. Click on **OK**.

   Clip Studio Paint will now load the file and prepare it for export. This may take several minutes, depending on your computer's specifications and the size of your file. Be patient!
10. Once the file has loaded, the export settings for the chosen file format will be shown. Adjust them as detailed in the other sections of this chapter.
11. Click on **OK** when all the settings have been adjusted to complete the export.

I am certain that this will save you so much time if you are creating a long story manga. But did you know that there is a manga sharing function in the Clip Studio Assets? It's one of the great places to share your creations, which will create a 3D viewer virtual manga book for you. Then you can use the link to the page to put on your social media! Let's find this out in the next section.

Exporting to Clip Studio SHARE

In this section, we're exploring the Clip Studio SHARE function in the Clip Studio Assets, where you can create a showcase of your work.

When you are uploading your manga that is more than four pages long, it's tough to show everything in order in divided posts on Twitter, Facebook, or other social media platforms.

Using Clip Studio SHARE helps to upload a manga that is more than 4 pages in length in the correct order by creating a special link for easy browsing, which you can paste on your social media! Clip Studio SHARE even creates a virtual 3D manga book for you with a cover and a spine of your design.

First of all, you need to have a manga that contains more than three pages and then follow these steps to create your manga on display using Clip Studio SHARE:

1. Click on the **CLIP STUDIO** icon on your Command Bar to go to the Clip Studio Assets. The icon looks like the one in the far left in the following screenshot:



Figure 19.24 – Screenshot of the Command Bar

2. Click on **Clip Studio SHARE** from the left-side menu on the Clip Studio Assets screen, as shown in the following screenshot:

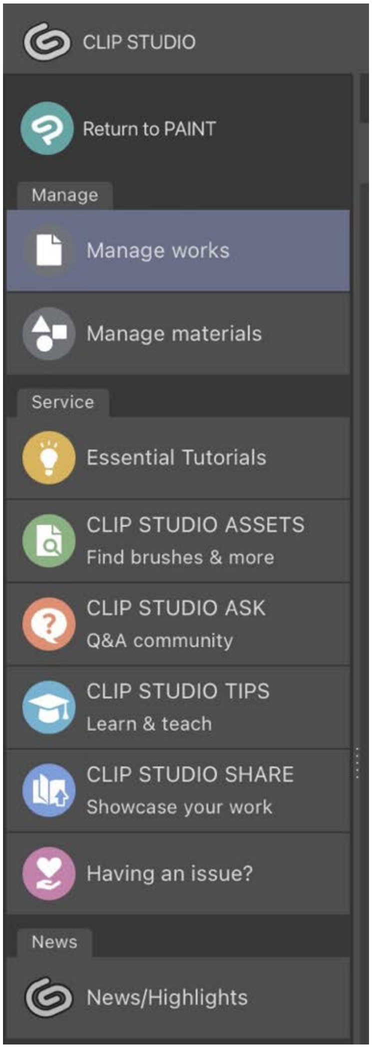


Figure 19.25 – Screenshot of the CLIP STUDIO ASSETS menu

3. In the **Clip Studio SHARE** screen, click the **Publish your story** button, as displayed in the following screenshot:

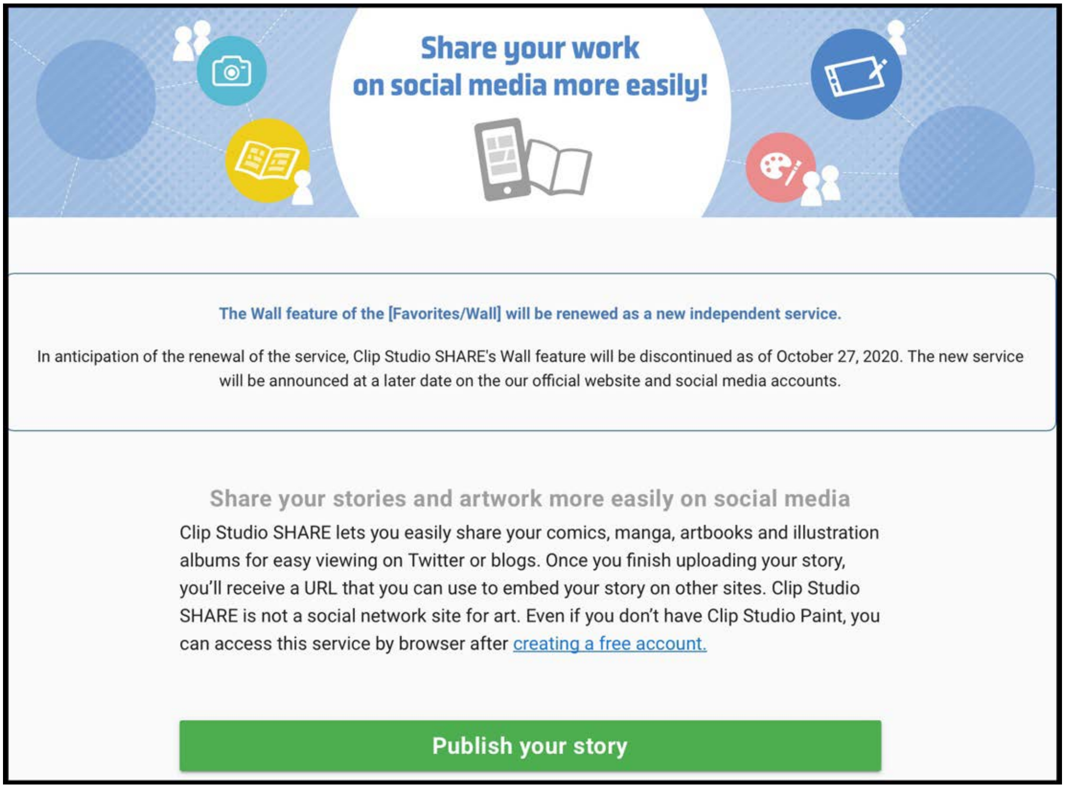


Figure 19.26 – Screenshot of the Clip Studio SHARE screen

4. There are two options – **Upload from browser** and **Upload from Clip Studio**. Clicking the **Upload from browser** option will let you select images from your computer browser, while **Upload from Clip Studio** will take you to the **Your work** list to select the story (the only option with the EX version) or images from the list. Selecting **Upload from browser** takes you to a **Reading direction** settings screen, where you can select the preferred direction. The screen looks like the following screenshot:

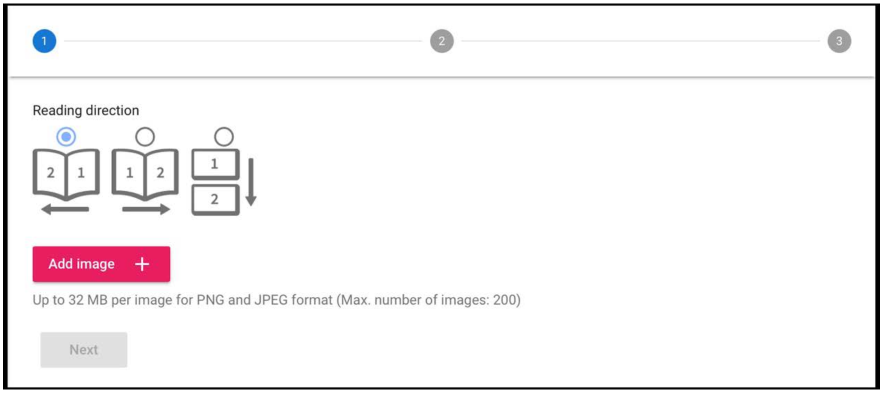


Figure 19.27 – Screenshot of the Reading direction settings screen

5. After selecting the reading direction, click **Add image** to select images in order on your computer browser, and then click **Add**. The screen will show you a list of the images you have selected and the order in which they will be displayed, which looks like the following screenshot:

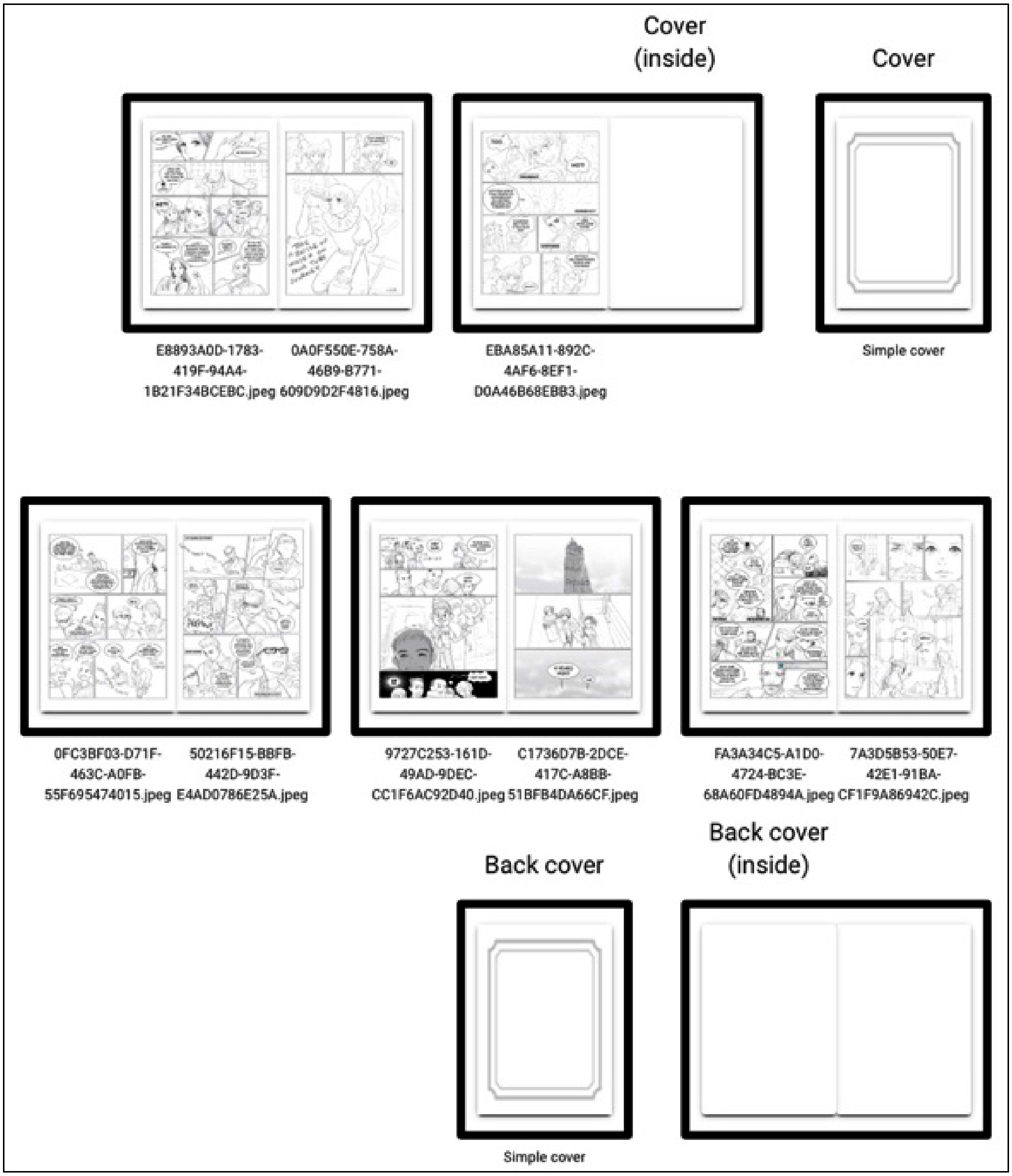


Figure 19.28 – Screenshot of a mockup page list

6. If everything appears fine to you, click the **Next** button. If you have selected **Upload from Clip Studio** in *step 4*, you will select images from the **Your works** list, and then the **Reading direction** settings screen will appear. If you have the Clip Studio EX version, you can select **Stories (horizontal reading direction)**. If not, you can only select one other option, **Webtoons (vertical reading direction)**. After selecting the artworks, a confirmation window will appear. Then, click **OK** in the window.
7. Once you have uploaded images from a browser or uploaded them from Clip Studio, you will see a screen for entering key information, including the title, thumbnail image, summarizing your manga in 200 characters, a thumbnail for social media sharing, a 3D viewer book size to pick from – A4, B5, or B6 – choosing whether the images will be aligned to the book size, cover stiffness, cover texture/finish, and a spine image.
8. After entering the preceding key information, click the **CREATE PREVIEW** button near the bottom of the screen to see the preview of your manga before displaying it in public. The 3D viewer will look like the following screenshot:



Figure 19.29 – Screenshot of a sample 3D viewer

9. You can edit the contents and click the **SHOW PREVIEW** button until the preview looks fine for you. Once you're satisfied with the preview, click the **Next** button at the bottom of the screen to bring up the **Visibility** settings screen, which looks like the following screenshot:

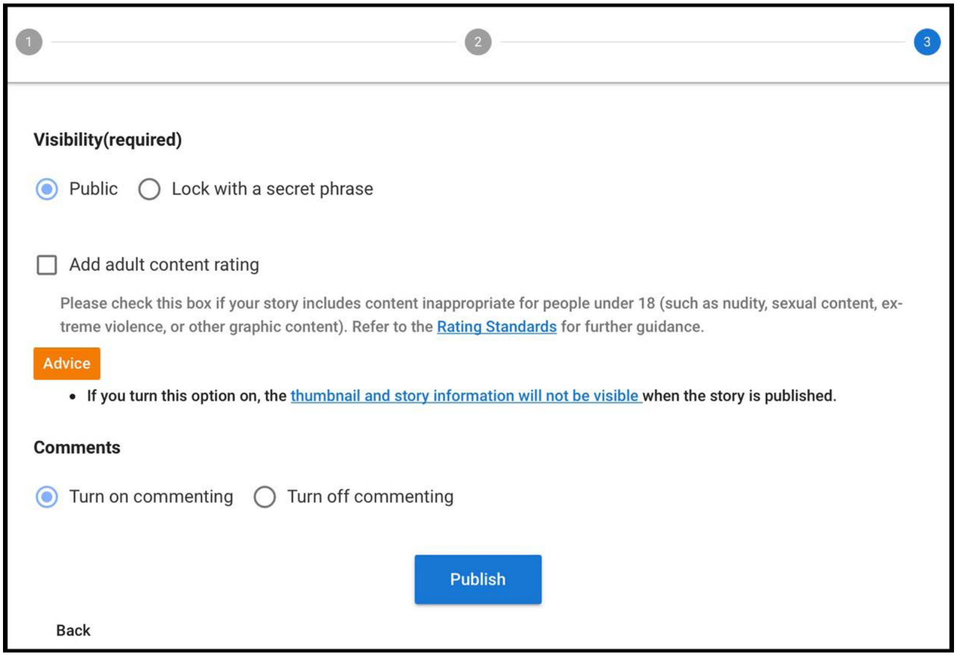


Figure 19.30 – Screenshot of the Visibility settings screen

10. On the **Visibility** settings screen, you can choose to publish your manga either by selecting **Public** (visible for anyone) or **Lock with a secret phrase** (visible only for people who know the secret phrase).

11. If you select **Lock with a secret phrase**, a textbox will appear for you to type in a secret phrase. Check the box next to **Add adult content rating** if the manga is not appropriate for a younger audience. Finally, select whether you want people to comment on your manga, and then click the **Publish** button. Then, the successful upload screen will appear, as per the following screenshot:

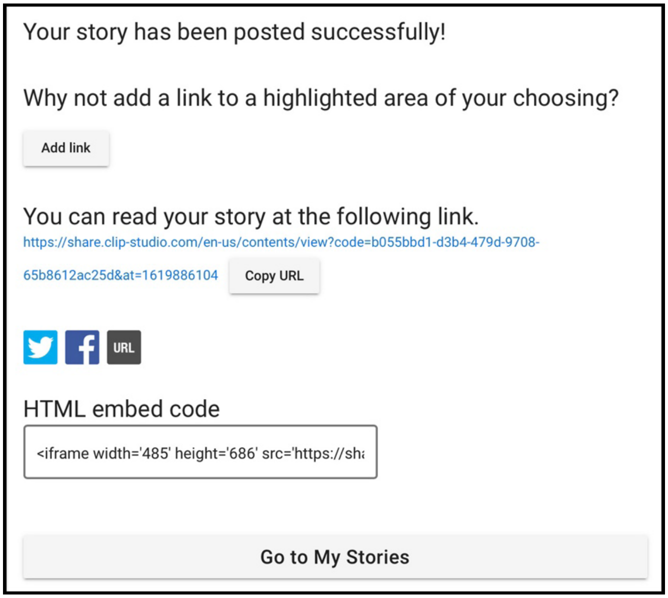


Figure 19.31 – Screenshot of a successful upload screen

12. You can add a link, copy a URL, copy HTML embedded code, or jump to Twitter and Facebook to post the link. If you want to edit or delete the manga, you can go to a screen with a list of your uploaded manga by clicking the **Go to My Stories** button.

Although this is virtual, it is great to see your manga book bound and displayed with a cover and spine, which you can flip through just like a physical book! Now you have a place for your own online manga showcase, with a function where people can leave comments. So let's share it with the world.

Summary

In this chapter, we have learned how to take our art from Clip Studio Paint and change it into files that we can share with the world. First, we learned how to print our images from Clip Studio to our home printer. Then, we learned how to export our images to be sent to a print shop, copy shop, or publisher. We learned how to adjust the image quality and the dimensions, and how to export our images so that they display well on the internet. Then we learned what a webtoon is, and how to export this in the EX version, and we also learned about another great EX privilege – exporting batches of pages. Finally, we learned about a great Clip Studio Assets service, Clip Studio SHARE, where you can create a virtual showcase of your manga.

We have been on a long journey of learning about Clip Studio Paint functions and how to use them and, with the next chapter, our journey will come to an end. Finally, we have reached our final chapter, *Chapter 20*, *Finding Your Own Manga Look*. Here, we are going to learn how to make your manga stand out and establish your unique manga look by using Clip Studio Paint to avoid a boring, generic look. I'm hoping you will find numerous useful tricks that you can apply to your creations.

20
Finding Your Own Manga Look

It has been a long journey of learning how to create manga using Clip Studio Paint and Clip Studio Assets and finally we have reached the last chapter to discover your own unique manga art style! We now know all the bits and bobs of Clip Studio Paint art techniques, but there is one big problem for digital art, which is artists using the same tools and methods, such as the same pens, the same 3D pose references, and the same screentones, sometimes making their art look similar and less unique.

We are going to look at how to avoid generic looks and explore the most suitable style for an individual artist. We are going to start looking at what visual effects each drawing tool has, and how to not use some obvious manga elements tactically; then, we will look at how to create and keep our own color selections, and we'll learn how to keep consistency throughout a whole story of a manga. Finally, we will look at how to change the final look of art by using different textures.

The following topics will be covered in this chapter:

- Choosing drawing tools
- Being unique by dropping some manga elements
- Finding and keeping your original color palettes
- Creating consistency
- Adding textures to art

By the end of this last chapter, we will be able to solve two problems as manga artists, which are having a uniqueness to our art and keeping consistency in our art.

This is a fun last chapter in which we will see the unlimited possibilities of using Clip Studio Paint. Let's jump in!

Technical requirements

To get started, you need Clip Studio Paint already installed on your device and at least one page of a manga or an illustration. I recommend creating an A5 portrait canvas in 300 dpi per page to go through the content in this chapter.

Choosing drawing tools

In this section, we will explore different tools we can use for the final inking stage. It can be a pencil, a pastel, or a brush. We are going to look at what visual impression each tool has with examples.

The most popular and traditional drawing tool for manga is the G-pen. It is the all-time winner for its smooth lines and the ability to control thickness depending on how much pressure we put on. But is it really the pen for everyone? Does your art really need smooth G-pen lines?

Choosing pens

If we look at the Pen tool category in Clip Studio Paint, there are many good ones already lined up by default. We are going to look at how to choose the right pen for us. First, let's have a look at art drawn using the G-pen in the following screenshot:



Figure 20.1 – Screenshot of a G-pen drawing

This is a look that we see in a lot of manga, a simpler drawing with a big contrast of black and white. But in some places, such as the character's eyes, there are lots of thin horizontal lines drawn to express shade. Though simple, the image has enough information for readers: the character's appearance, facial expression, clothing, and activity, which is feeding a heron. We can't detect the character's personality much, but at least we understand what is going on in this one panel.

But how can your drawing stand out among other people's drawings that also use the G-pen? One good way is to swap the G-pen for a different pen. Look at the following figure for examples:



Figure 20.2 – Screenshots of turnip and mapping pen drawings

The art in *Figure 20.2* has been redrawn using the turnip pen and mapping pen in the preceding figure. Like the G-pen, both come as a default pen in the Pen **Sub Tool** palette in Clip Studio Paint. We can see the visual impression has been changed by using different types of pens. The image on the left in the preceding figure has more impact with thick lines created by using the turnip pen, losing small details but eye-catching. The image on the right has delicate thin lines created by using the mapping pen; it has less impact but shows more small details to enjoy looking at.

Thicker lines are commonly used in manga for children and delicate lines are often used in the romantic manga genre. Depending on the content, audience age group, and, most of all, how comfortable you are with using the pen, you can start thinking of which pen works the best for you.

The following screenshot shows the pens I downloaded from Clip Studio Assets, where you will see tons of varieties of pens available:



Figure 20.3 – Screenshot of various pens

The pens we see in the preceding screenshot are some of my favorites. I personally love to use the Black Ink Brush pen and Kasure Moji pen for sound effects in manga, because their lines are so unique that readers can distinguish them from other drawing parts easily. We discussed how to use Clip Studio Assets in *Chapter 18*, *Exploring the Clip Studio Assets and Animation*.

It's very good to know about different types of pens and how they give a certain impression to our art, but what about other drawing tools? Read on to find out about alternatives to pens.

Choosing alternative inking tools

There are some manga artists that decide to use a Pencil tool for final inking while others use it for a draft. One of the reasons for using Pencil as a final inking tool is its crafty feeling. Not only is it light and easy to draw but it also gives a warm, hand-drawn impression just like looking at an artist's sketchbook. The following screenshot shows a panel drawn with a Pencil tool:



Figure 20.4 – Screenshot of a pencil drawing

We see a pencil drawing and marks made by various Pencil tools in the preceding screenshot. There are differences from a pen drawing, such as that the lines are not very smooth and clear and the shading is not a flat black patch, and we can still see pencil marks. With the Pencil tool, we can also create other art elements such as speech bubbles and sound effects to have harmony with our art. Slice-of-life or fantasy story manga often use pencils or pastels for final ink drawings for a warm and cozy feeling.

Let's have a look at another alternative of using a brush instead of ink in the following screenshot:



Figure 20.5 – Screenshot of a brush drawing

In the preceding screenshot, we see a brush drawing and other brush mark samples. What's great about using a brush is we can instantly change the visual to something dramatic and easily create black to gray tones. The shadow of the character at the bottom of the image shows textured gradation. The lines are not as smooth as those made with Pen tools, but Brush tools give us the space to have fun using smudges, smears, or blur effects. We often find manga artists using Brush for horror, suspense, and traditional oriental-style manga.

> **Tip**
>
> Once you pick one inking tool, stick to the tool throughout the whole manga, except if you want to add a different impression to particular parts of the story, such as episodes from someone's past or a dream sequence. For instance, if you started using the G-pen in 12 pt, keep using it until the end. Otherwise, the visuals of the manga will not hold consistency, and readers will not be able to concentrate on the story anymore.

Now, you might have some favorite drawing tools to use in your next manga project. But it is sometimes hard to remember which tools we picked and it takes time to scroll down the **Sub Tool** palette every time we're trying to find a particular one. Let's tidy up our tools by creating a new sub tool group to keep drawing tools for a particular project together by following these steps:

1. Select a tool you would like to use for your manga. In this step, we selected **Real G-Pen** in the **Pen Sub Tool** palette.
2. Click the **Duplicate sub tool** icon, which looks like two squares overlapping, at the bottom of the **Sub Tool** palette. This will bring up the **Duplicate sub tool** dialog box as the following screenshot shows:

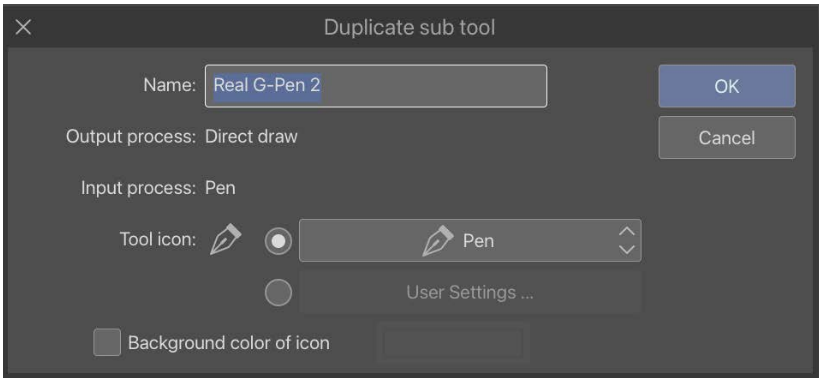


Figure 20.6 – Screenshot of the Duplicate sub tool dialog box

3. Click **OK** and **Real G-Pen 2** will be added to the **Sub Tool** palette. This is a copy of **Real G-Pen**, as you can see in the following screenshot:



Figure 20.7 – Screenshot of the Pen Sub Tool palette

4. Click **Real G-Pen 2** and hold down the mouse button or stylus, then drag to the top-right corner of the sub tool group row, where a red line will appear as in the following screenshot. Then, release the mouse button or stylus:

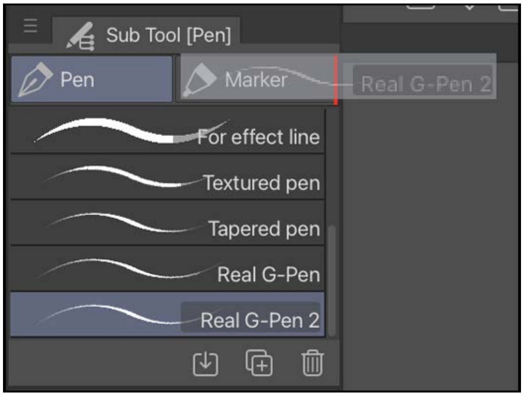


Figure 20.8 – Screenshot of dragging the sub tool

5. Now you see **Real G-Pen 2** is moved to a sub tool group row, which is pointed to with an arrow in the following screenshot:

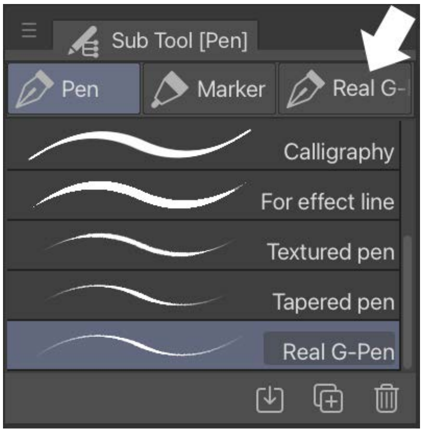


Figure 20.9 – Screenshot of a new sub tool group

6. Next, we are going to add a new tool to the **Real G-Pen 2** sub tool group. Click **Tapered Pen** and then the **Duplicate sub tool** icon. Then, click **OK** on the **Duplicate sub tool** dialog box just as we did in *step 2*. **Tapered Pen 2** will appear in the **Sub Tool** palette.
7. Click **Tapered Pen 2** and hold the mouse button or stylus, then drag it to the **Real G-Pen 2** sub tool group until the sub tool group name is highlighted in a red square, as in the following screenshot. Then, release the mouse button or stylus:

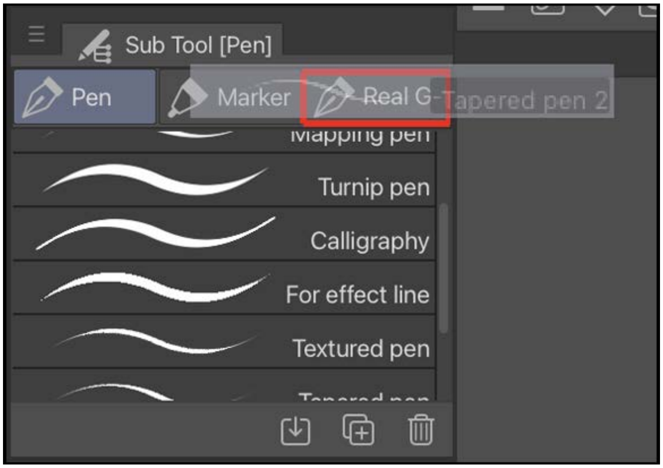


Figure 20.10 – Screenshot of the highlighted group name

8. Repeat *steps 6* and *7* with all the tools you want to add to the new sub tool group. You can also drag and drop tools from other tool categories. When you want to add a new tool from your Material palette, click the **Import sub tool material** icon at the bottom of the **Sub Tool** palette, which looks like a downward arrow in a square, to bring up the Material palette, shown in the following screenshot.

9. Select a tool you want to add to the group and click **OK**, and the tool will be added:

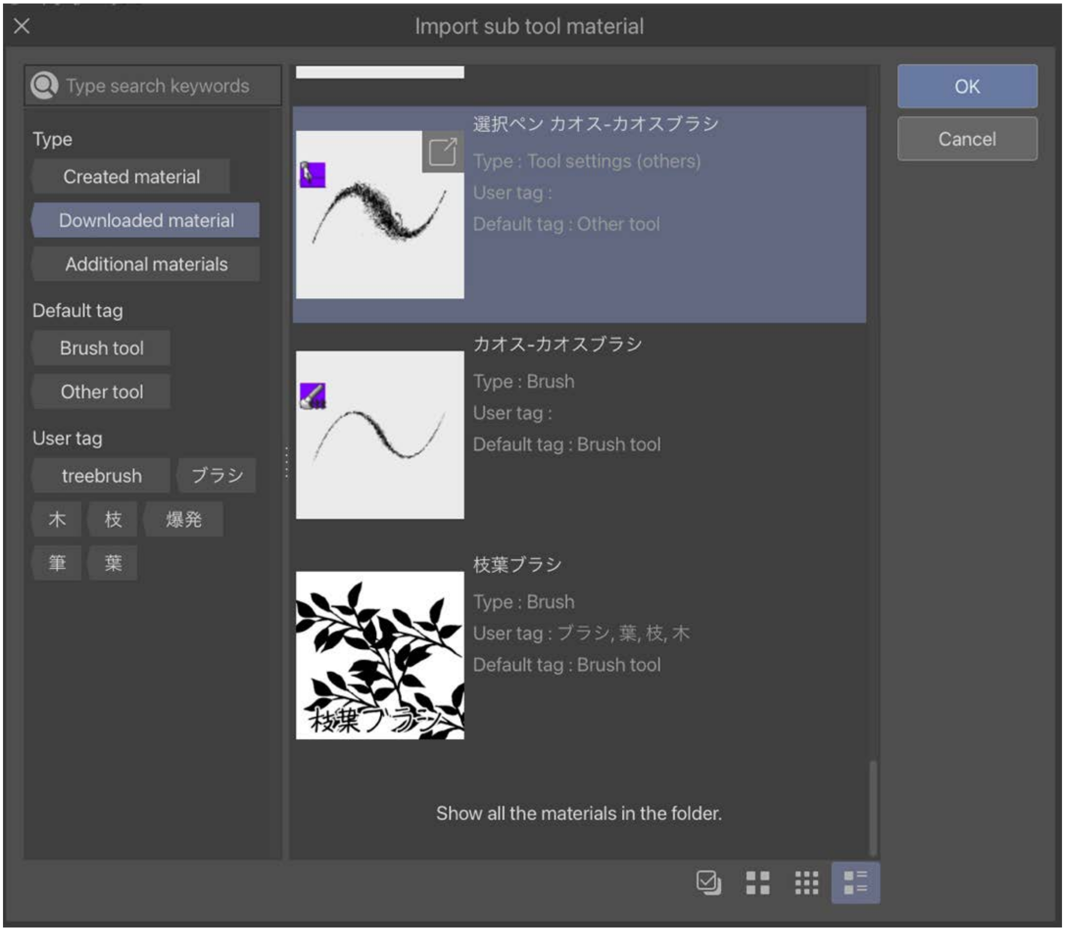


Figure 20.11 – Screenshot of the Import sub tool material window

10. After you have collected all the tools, click the **Real G-Pen 2** sub tool group, and then you can check that all the collected tools are safely added to the group.

    Now we are going to change the group name from **Real G-Pen 2** to our manga project name.

11. Click and hold the group name you want to change and the **Settings sub tool group…** option will appear as in the following screenshot. Then, release the mouse button or your stylus:

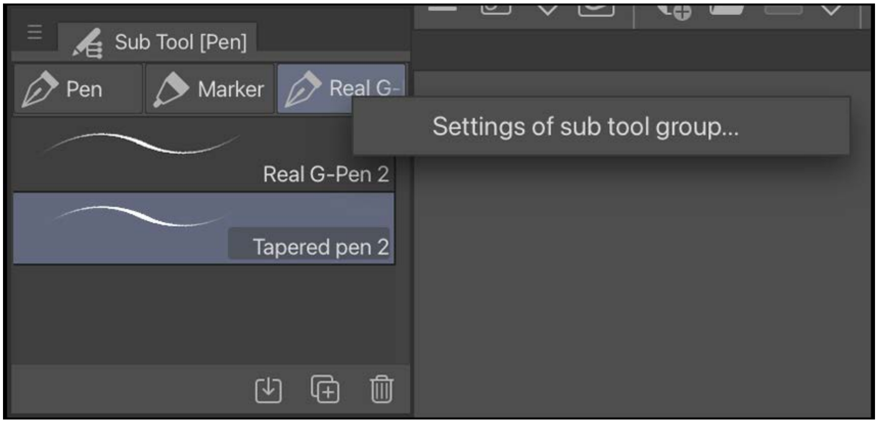


Figure 20.12 – Screenshot of the Settings of sub tool group… option

12. Click the **Settings of sub tool group…** option to bring up a **Settings of sub tool group** dialog box as in the following screenshot, where you can enter a new name for the group. Type a new name and click **OK**:

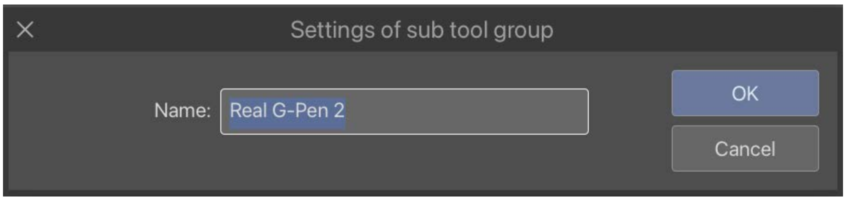


Figure 20.13 – Screenshot of the Settings of sub tool group dialog box

13. Done! Check the **Sub Tool** palette to see whether the new sub tool group name is displayed.

Now we have a tool group for our new manga project, so we don't have to try to memorize which tools we're using and go through the **Sub Tool** palette, scrolling up and down to find the right one every time we go back to the project!

It's always good to try out different types of tools and check how it feels to use them. We have seen different Pen tools and how they make a different impression and learned about alternative tools to Pen, such as Pencil and Brush tools. Finally, we learned how to create a new sub tool group to collect inking tools for a specific manga project.

We are now able to find the right tool that is both suitable for a theme of our manga and comfortable to use and we know how to keep them safe as a group.

Tools are fine, but sometimes there are too many elements we want to throw into our manga, since we know so many tools and techniques. Don't worry, we can decide to ignore certain elements in our manga, and sometimes it's better that way. Read on to find out what you can drop and what to keep.

Being unique by dropping some manga elements

There are certain elements in manga that artists put in for readers to be able to follow the story without losing their way and to help them understand what is happening. But there are also artists who make brave decisions not to put certain elements that seem vital to manga, because they are aiming for a specific atmosphere they want to create.

In this section, we are going to learn what will happen if we drop some manga elements with examples.

Not using screentones

Screentones are a great tool for expressing gray tones and patterns, and Clip Studio Paint offers many different types of screentones to use. But they might get in our way if we would like to create an intense high-contrast look in black and white. Let's have a look at the example in the following figure:



Figure 20.14 – Screenshots of images with and without using screentones

The preceding figure shows a comparison of the same panel from my manga. The image on the left is created with screentones and the image on the right is created without it. The actual panel I used for my manga is the image on the right, which is without screentones. The reason for this is that I was aiming for a high contrast of black and white to express the intense and uneasy mood, and I also wanted to put an emphasis on the full moon to express that this is a night scene. In that case, we don't need to follow the usual manga creation process to add shades; sometimes we don't need midtones to intensify the feeling.

How about when we want to avoid high contrast to express a relaxing and romantic moment? We might not need to fill black for shading. Read on to find out why.

Not using Fill tools

When we are working on our manga, Fill tools are a great time saver that fill colors in a selected area with one click. Thanks to these tools, we can add dark hair color or deep shade at the speed of light. Fill tools are perfect when we draw high-contrast black and white art, but when we want a soft lighting effect, we can forget about them. For relaxing, soft, and dream-like sequences, filled black parts might be too much for the eyes. The following figure shows a comparison of the same panel created by using the Fill tool and the Hatching tool:



Figure 20.15 – Screenshots of Fill and Hatching tool shading

Even though the character has dark hair and eyes, we can still lift the brightness of the art. To avoid making it too dense with black parts occupying the visual, we use the Hatching tool instead of the Fill tool. In the preceding figure, the image on the left uses the Fill tool for shading, and the image on the right uses the Hatching tool instead. The result is remarkably different. The panel looks much softer with the Hatching tool. It's good to remember that when we want to change the mood or make the visual impression of a manga lighter, we swap the bucket Fill tool with the Hatching tool to shade. We can always find the Hatching tool in the **Sub Tool** palette of the **Decoration** tool category.

How about not using something vital such as sound effects? Let's see what happens if we decide not to use it.

Not using sound effects

Sound effects are great elements for any media, such as comics and manga, that don't have audio. Comics and manga are famous for using lots of sound effects; we see *Pow*, *Shut*, *Crash*, and *Whiii*, in various fonts on manga panels. Of course, we can create our own sound effects; jump back to *Chapter 11*, *Creating Your Own Sound Effects*, to find out more. But what will happen if there are no sound effects on manga?

Have a look at the following figure showing the same panel with and without sound effects:



Figure 20.16 – Screenshots of a panel with and without sound effects

The images depict a character falling from a building and crashing through the window glass. The image on the left shows a sound effect while the one on the right has no sound effects. When we don't see sound effects, the depicted action looks like a slow-motion effect. When artists want to make a big action scene memorable but give an uneasy feeling, they often remove any sounds. But when they want to show that the action happened quickly, they add sound effects. It's just like when a film director removes all sound suddenly in a big action scene to make the audience uneasy and give a different impression from the rest of the scenes in the film. We can use this technique with our manga too!

We will now see that there is another manga element we can skip in the next section, which is speech balloons.

Not using speech balloons

Speech balloons are another brilliant invention, to make characters speak, shout, sing, and mumble. The balloon shape drawing contains text and has a tail to indicate which character's dialog it is. Speech balloons are a great function to add voice to non-audio media such as manga that we can add to any image of animals or even objects to make them speak like manga characters! If you want to read more about speech balloons, go to *Chapter 7*, *Using Text and Balloon Tools*.

When we want to put emphasis on something else rather than dialog, then this is a case where we might not use speech balloons. Let's have a look at an example in the following screenshot:



Figure 20.17 – Screenshot of a page without speech balloons

This image is from a quarrel scene between two characters from my manga. The text in the background is their dialog but it is added without speech balloons. It was my artistic decision not to use speech balloons, to put an emphasis on the situation rather than the content of the dialog. The two characters are having a quarrel because they are both jealous; what they are saying are merely excuses to confront each other. When they get agitated and start raising their voices, the font size gets bigger to the point where parts of the text are cut off by the panel border in the last panel. We can apply this technique any time we need a change of look in our manga.

If we want to differentiate our manga from others, it can be very effective to not only change drawing tools but also forget about screentones, fill color, sound effects, and even speech balloons!

For artists who create color manga, it's always recommended to use your own color palette to stand out. Read on to learn how to create your own color palette.

Finding and keeping your original color palettes

Manga doesn't always have to be black and white or multicolored. When we use color for our manga, color combinations work like a trademark for a company for readers to recognize your work instantly. It is possible to show the uniqueness of the color palette we use!

In this section, we are going to learn how to decide on effective colors. By the end, we will have some ideas of how we can use colors in our manga. We don't need to worry about creating palettes when drawing one-off illustrations, but in the situation of drawing 30 or more pages of manga in color, you definitely need a palette to keep color consistency! Readers will be confused if every time the main character appears their skin tone and clothing are in different colors—that is inconsistent. And of course, we want to save time going back and forth between pages to find the right color. If you want a reminder of what a color palette is, go to *Chapter 15*, *Color Palette*.

Using one extra color

Let's start with a few colors on a manga. We know black and white is the most common color set for manga. We can also add an extra color. The following screenshot shows an example of black and white plus an extra brick color on a manga:

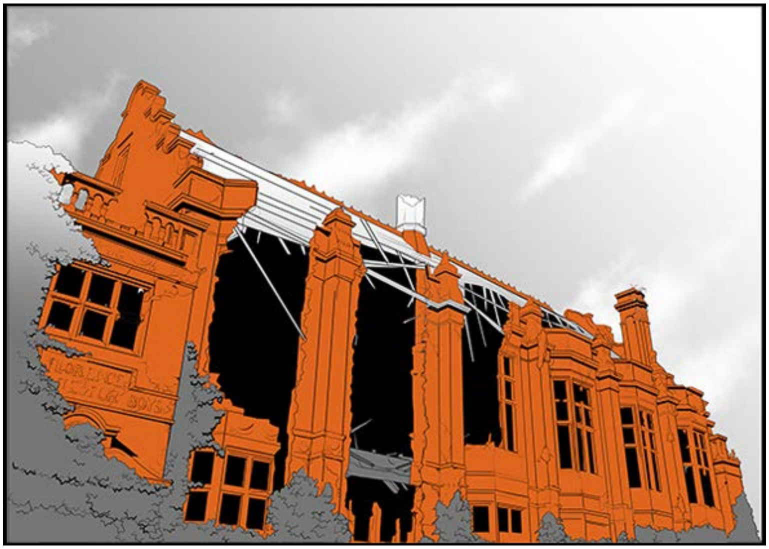


Figure 20.18 – Screenshot of an image with an extra brick color

The building part has a brick color, and everything else is in black and white with gray tones. There is a reason for the brick color. The ruined building in the image plays a big role in the story, and I wanted to make its brick color iconic. Every time the building appears in the manga, it is always accompanied by this color. Adding just one color is a great way to make a brilliant impression on a key element, and of course, we don't need to use lots of color, which means saving time when we work on many pages.

> **Tip**
>
> We don't need a color palette for just one extra color on black and white manga. Instead, when we create the first page of the manga, we create a new **Frame Border** folder and add a new layer with the color already painted in the folder, then click and move the folder to add it to the Material palette. So, when we go to the next page, we don't have to open the previous page to find the color and use the eyedropper tool to pick, or open the **Color History** palette to search for it. We simply need to click the saved **Frame Border** folder in the Material palette and then drag and drop it onto our **Layer** palette. Easy!

It's simple and easy to handle just one extra color. Let's move on to see manga with several colors.

Using limited colors

Using limited colors instead of full colors for manga art is also good to give it a unique look! Adding one extra color still works along the same lines as creating black and white manga with just one extra process on top of a black and white manga creation. Starting to use multiple colors creates a more complicated process, but it has much the same impact on a visual image as full color.

There are ways to create a limited-color manga. The following screenshot shows one example, a page from my manga with three extra colors:



Figure 20.19 – Screenshot of a manga page with three extra colors

On top of a black and white manga, I added yellow, beige, and pink. The pink color decides the overall tone of the manga to give it a pop and an arresting impression! Depending on what we choose as the main color, the impression changes dramatically. Sometimes just a few colors depict the theme better than full color, and I recommend you try starting out by adding one or two colors to your manga to see how the pages come out.

> **Tip**
>
> When we try out several colors and decide to use some of them, we can always get them back from the **Color History** palette by clicking on **Window | Color History** in the **File** menu. Then, we save the colors from the **Color History** palette by clicking on the icon in the top-left corner of the palette, then clicking on **Register to color set palette** to save the color swatches. We can also edit the color set by removing or adding colors. But the color set we use should stay the same all the way through working on the manga to keep consistency. With the color set swatch opened, we can easily pick the right color while working on a color manga! For more about the color palette, go to *Chapter 15*, *Color Palette*.

Limiting what colors we use and using them only when we really need them is a great way to control the overall impression of our manga, and also leaves less work for the coloring process than a full color one, as skipping even one process makes a big change, especially when we are working on a big project such as a 100-page manga!

We have been looking at how to use color tactically. We started by adding one extra color to a black and white manga and then moved on to limit the colors we use. Next, we are going to learn how to keep consistency in character drawings. Your charming characters should always look the same, no matter what angle we are looking at. Read on to find out how.

Creating consistency

This is one of the most difficult but vital parts of creating sequential art including picture books, graphic novels, comics, and manga. A character needs to be recognized as the same character on every appearance in any panel, no matter what angle, what expression, and what posing the character has in a panel. This is because the art needs to be able to read through as a story, not a collage of random drawings.

In this section, we are going to learn how to keep consistency in our manga. We will find various ways to help us go through the process of creating a whole manga with the visuals intact.

The best way is to create a character guide. This will work as a manual that we can always have a look at for reference. I recommend creating two different visual guides.

One is a reference image with one character in a standing pose, some facial expressions, and particular items or aspects that need attention to draw, if any. You can see the following figure for an example of a character guide:



Figure 20.20 – Screenshots of three examples of a visual character guide

The far-left image is a visual character guide for a black and white manga, the middle is for a limited-color manga, and the right is for a full-color manga in the preceding figure. These are basic examples with one standing pose and two different angles and facial expressions. Depending on the character design, we can add a standing character showing their back and more facial expression images. We can create them in whatever canvas size and shape is easy for us to use.

Another visual guidance that is good to have as a reference is a character height comparison. If we have one image with characters together that shows who is taller than who, we'll never make a mistake with the character scale. The following screenshot shows an example of a height comparison:



Figure 20.21 – Screenshot of a visual character guide for characters' heights

It's obvious who is taller than who in the preceding screenshot. When we work on a panel that shows more than one character, and especially when they are associating with each other somehow, the visual guidance really helps us to remember the scale of each character and height differences.

Tip

It's very time-consuming to go on a search for reference images whenever we go back to a certain project! But using the **Sub View** palette, we can always have the reference image on display on our Clip Studio Paint interface. To bring up the **Sub View** palette, click **Window | Sub View** on the **File** menu. To open a reference image in the **Sub View** palette, click on the **Import** icon (it looks like a folder with an arrow pointing to the right). This will open your file browser. In the file browser, navigate to the image to be imported. Click on the file to select it. Click **Open** to complete the import. For more on how to use the **Sub View** palette, jump back to *Chapter 6*, *Erasers, Selections, and the Sub View Palette*. We will be able to use images displayed in the **Sub View** palette not only for characters' visual references but also for color reference too!

We have been looking at creating and displaying visual guidance for character drawings. We can make a more detailed guide with text explanations if we want. This technique can also be applied to buildings, vehicles, and objects. It's really helpful if we have visual guidance for anything we need to draw many times at different angles for our manga.

In the last section, we are going to learn about some good visual effects we can use in Clip Studio Paint, by adding textures to our art.

Adding textures to art

We have learned how to color (*Chapter 16*, *Using Clip Studio Paint to Color Your Manga*) and how to pick and keep colors (in the *Finding and keeping your original color palettes* section in this chapter). Now we are going to learn how to add textures on top of our colored art in this section for a final process of your Clip Studio Paint art creation. This is another great way to give a unique look to your art.

Chromatic aberration

Chromatic aberration is described as the failure of a lens to focus all colors to the same point. This means red, blue, and green colors are visible as a fringe along boundaries that separate dark and bright parts of the image. Yes, it is a failure, but this incident creates a great texture on art. Let's see the following sample images that show before and after the chromatic aberration effect being applied:

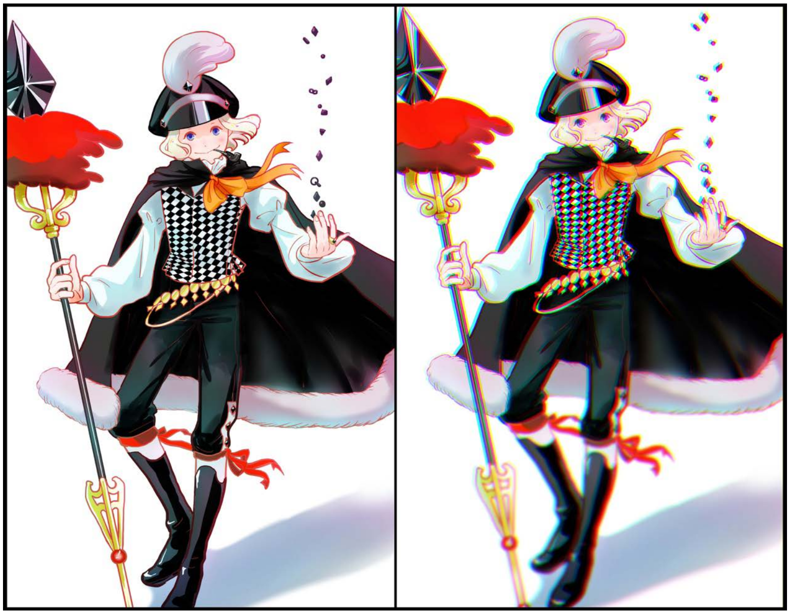


Figure 20.22 – Screenshots of images before and after the chromatic aberration effect

If we compare the preceding two images carefully, we will notice the image on the right has the chromatic aberration effect applied and has a red, blue, and green color fringe around the boundary of the character and the background. The additional blur effect on the bottom half of the image creates the illusion of the image being 3D. By combining it with other textures, we get a different visual illusion.

The following figure shows an image before and after applying the chromatic aberration effect and a noise texture:

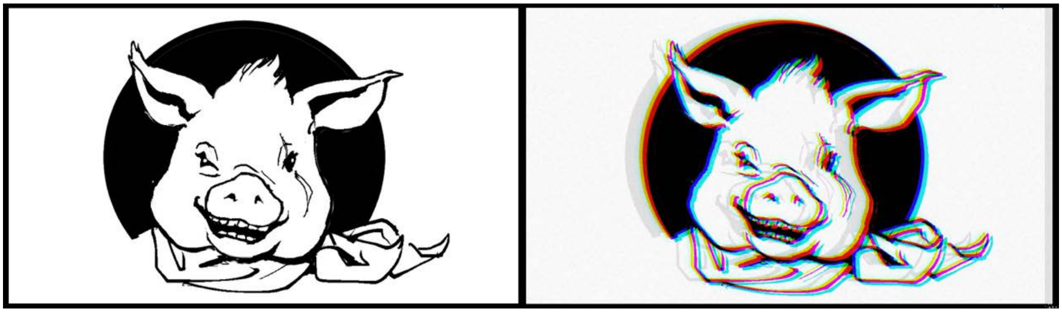


Figure 20.23 – Screenshots of an image with and without the chromatic aberration and noise effect

In this sample image, the chromatic aberration effect is used not for a 3D illusion but to produce a nostalgic old television screen effect with a noise texture. This effect works remarkably well when we create a nostalgic illustration or manga.

These chromatic aberration effects have been done with just one click, using an Auto Action asset downloaded from Clip Studio Assets. We can find these effects by searching `chromatic aberration` or `RGB Shift` on Clip Studio Assets.

We can find more great effects and texture examples in the next section. Read on to find out how to add paper texture to our art.

Paper texture

There is of course no paper texture that really exists on digital drawings since they're not drawn on physical paper, but we can add it for a final touch to our art. We can express a sense of paper texture on a digital drawing using Pencil or Watercolor tools to some extent, but it is easier to add it to the entire page by using texture materials and the layer blending modes.

Follow these steps to add a rough paper texture to your art:

1. Have your canvas with the art already opened, go to the **File** menu, click **Window | Material**, and then click **Material [Monochromatic pattern]** from the **Material** drop-down menu, as we see in the following screenshot:

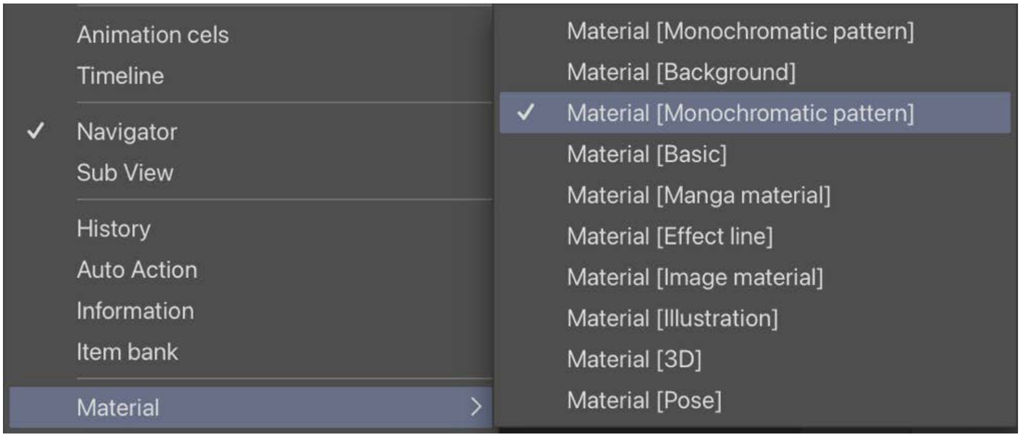


Figure 20.24 – Screenshot of the Material drop-down menu

2. The Material palette is now opened, showing a list of monochromatic pattern materials with thumbnails. Scroll down the list until you find **Rough textured** and click on it.
3. With the material selected, click the **Paste the material to canvas** icon at the bottom of the Material palette as circled in the following screenshot:

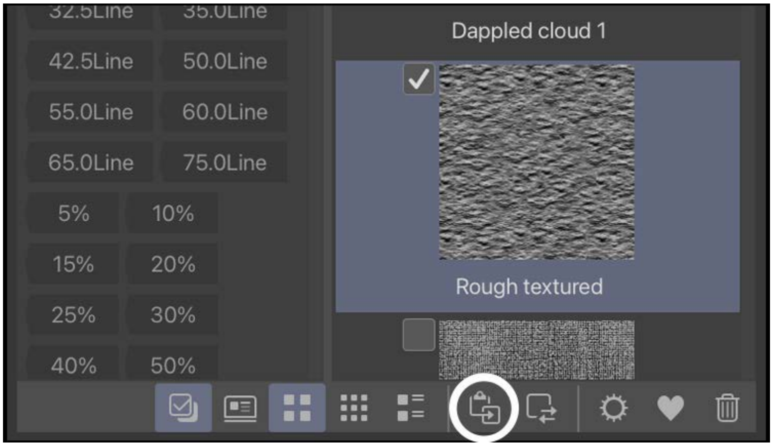


Figure 20.25 – Screenshot of the Material palette

The **Rough textured** texture is now pasted and we can see the pattern on our canvas, on top of our art. The new layer with the texture is now in the **Layer** palette, as we see in the following screenshot:

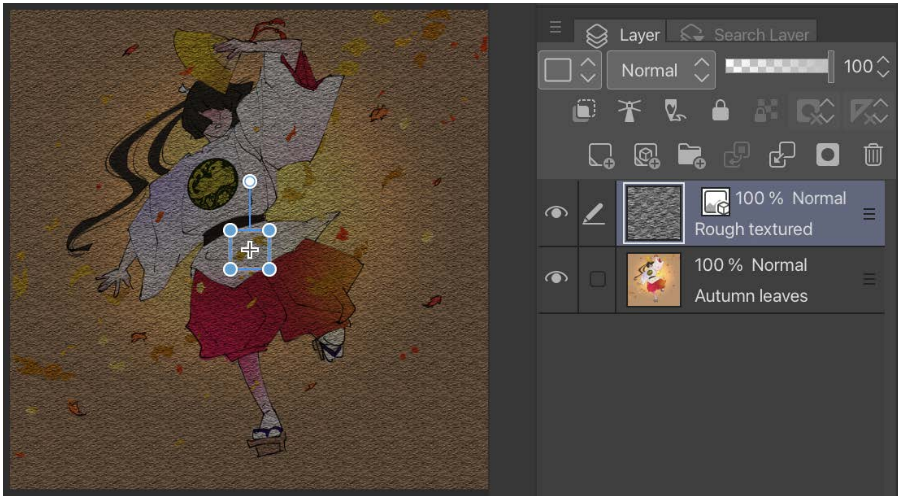


Figure 20.26 – Screenshot of the canvas and Layer palette

4. The handle with a square in the middle of the canvas is for changing the angle and size of the pattern by click and dragging around. When you finish editing the pattern with the handle, click the **Layer blending mode** menu at the top of the **Layer** palette and click **Overlay** from the drop-down menu, as in the following screenshot:



Figure 20.27 – Screenshot of the canvas and Layer palette with a drop-down menu

5. Finally, change the opacity of the texture layer by moving the **Opacity** slider at the top of the **Layer** palette. In this step, change it to **45%** as in the following screenshot:



Figure 20.28 – Screenshot of the canvas and Layer palette with 45% texture opacity

It's done! Your image now has a rough paper texture!

Now we know how to add different textures by using either an auto action or texture image material with the layer blending mode. The preceding examples are just two of many from the textures available on Clip Studio Paint. We might find a more interesting combination of beautiful textures if we keep trying out new things.

Summary

In this last chapter, we have learned how to make our art stand out from others, starting off with choosing drawing tools and how to keep them, and moving on to how to make the artistic decision to not use some manga elements. Then, we looked at how to keep consistency in a comic or your manga art, and finally, we learned how to add textures to the finished art. It was a long and fun journey going through 20 chapters to learn how to use Clip Studio Paint for our creations, and now it has come to an end. I hope all these skills and tips you have learned throughout the book will be helpful and inspiring to your creative life.

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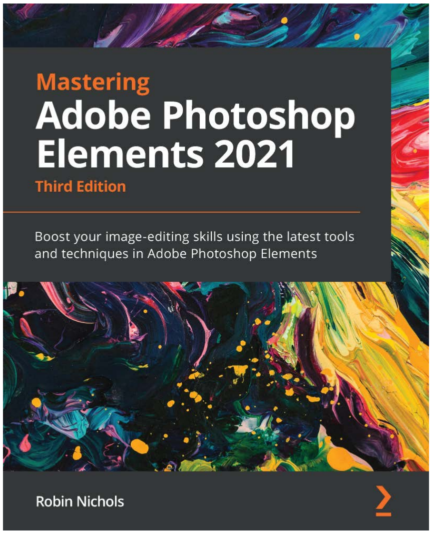
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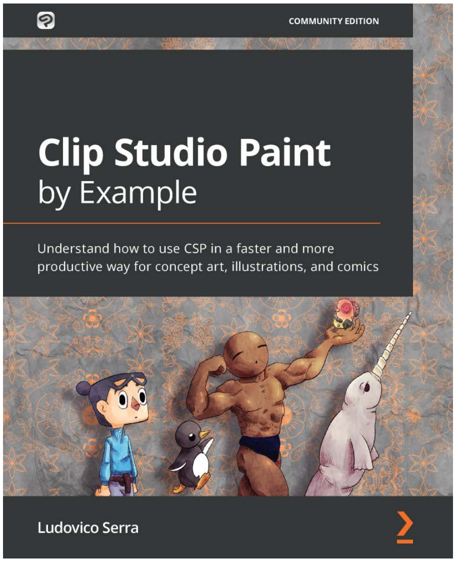


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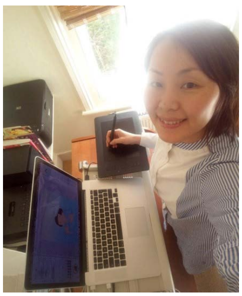
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Best Wishes,

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